Final

Environmental Assessment

Proposed Demolition and Consolidation Maxwell Air Force Base Montgomery County, Alabama



September 2013

Report Documentation Page

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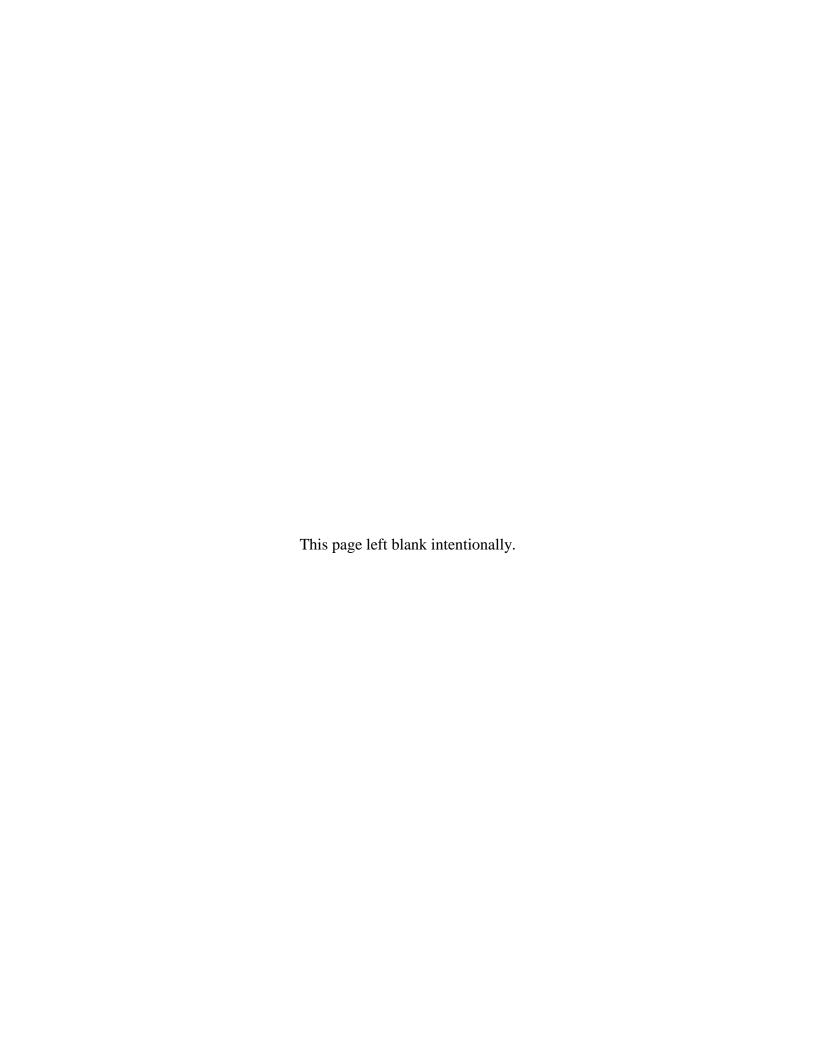
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13. SUPPLEMENTARY NOTES

14. ABSTRACT

As a result of a memorandum signed by President Obama in June 2010, the Air Force has implemented a ?20/20 by 2020? initiative to reduce both the ?facility footprint? and energy usage by 20 percent by the year 2020. The goal established for Maxwell Air Force Base is to reduce its real property footprint by approximately 1,188,000 square feet by 2020, which averages a reduction of approximately 84,900 square feet annually for the remaining years between 2013 and 2020. The Proposed Action is a Demolition and Consolidation effort for helping to meet these goals. The Proposed Action was formulated based on: facility age, historical significance, general operation and maintenance history, renovations required in the future, whether the facility is suitable for occupants, and how complicated consolidation moves of occupants might be. Approximately 50 facilities have been proposed for demolition, and 8 other properties were identified as potential property transfers. Under the No-Action Alternative, the facilities would continue to age and deteriorate. Occupants would eventually have to be relocated, and the buildings closed. The No-Action Alternative would not work toward agency goals of reducing energy usage and operating and maintenance expenditures. The No-Action Alternative would fail to provide adequate planning for eventual moves and facility disposition.

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COVER SHEET

FINAL ENVIRONMENTAL ASSESSMENT FOR PROPOSED DEMOLITION AND CONSOLIDATION MAXWELL AIR FORCE BASE, MONTGOMERY COUNTY, ALABAMA

Responsible Agency: Department of the Air Force

Contact for Further Information: Jeff Jones, CSP, CHMM, CHST

ESH Manager

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42 CES/CEIE

Proposed Action and Location: The Air Education and Training Command (AETC) and its 42d Air Base Wing (ABW) at Maxwell Air Force Base propose to dispose of unneeded and unserviceable facilities through a combination of demolitions and property transfers. The Proposed Action also includes one small construction project to create a semicircular turn-around loop at the southwest end of the active runway.

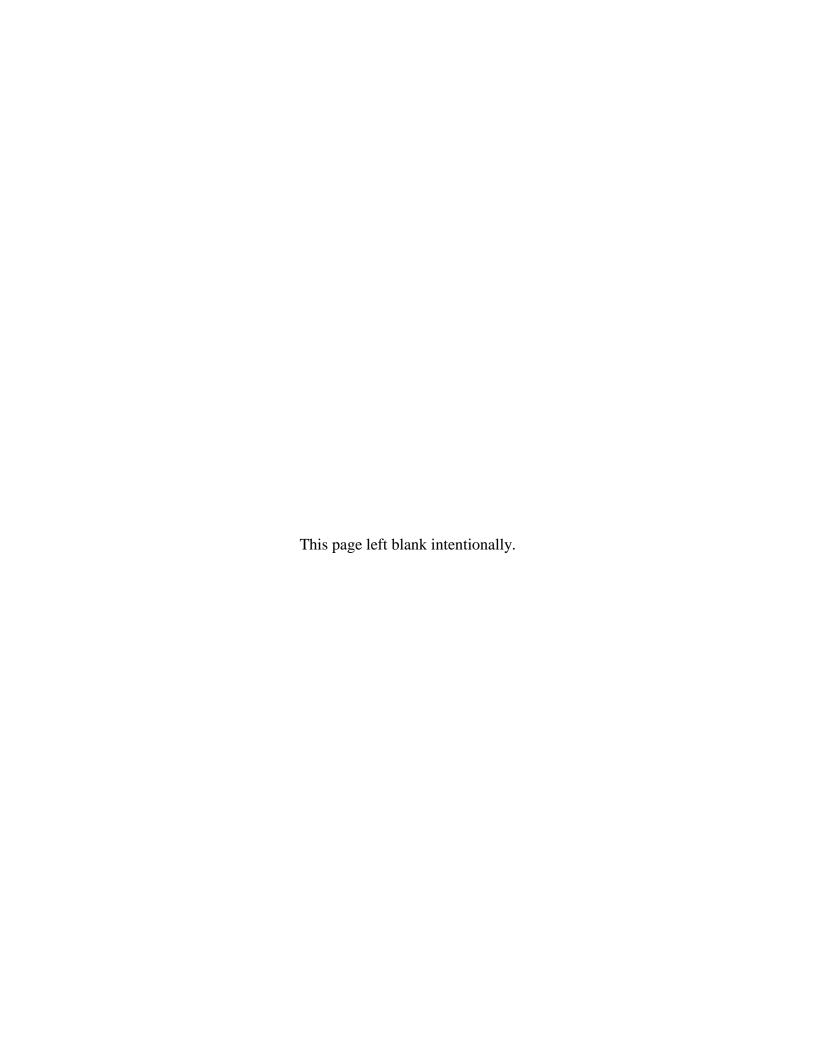
The Proposed Action will take place within the installation boundaries of Maxwell Air Force Base and its Gunter Annex, which are located in the City of Montgomery, Montgomery County, Alabama.

Designation: Final Environmental Assessment

Abstract: As a result of a memorandum signed by President Obama in June 2010, the Air Force has implemented a "20/20 by 2020" initiative to reduce both the "facility footprint" and energy usage by 20 percent by the year 2020. The goal established for Maxwell Air Force Base is to reduce its real property footprint by approximately 1,188,000 square feet by 2020, which averages a reduction of approximately 84,900 square feet annually for the remaining years between 2013 and 2020.

The Proposed Action is a Demolition and Consolidation effort for helping to meet these goals. The Proposed Action was formulated based on: facility age, historical significance, general operation and maintenance history, renovations required in the future, whether the facility is suitable for occupants, and how complicated consolidation moves of occupants might be. Approximately 50 facilities have been proposed for demolition, and 8 other properties were identified as potential property transfers.

Under the No-Action Alternative, the facilities would continue to age and deteriorate. Occupants would eventually have to be relocated, and the buildings closed. The No-Action Alternative would not work toward agency goals of reducing energy usage and operating and maintenance expenditures. The No-Action Alternative would fail to provide adequate planning for eventual moves and facility disposition.



FINAL FINDING OF NO SIGNIFICANT IMPACT PROPOSED DEMOLITION AND CONSOLIDATION MAXWELL AIR FORCE BASE, ALABAMA

Agency: United States Air Force (USAF), Air Education and Training Command (AETC), 42d Air Base Wing (ABW)

Background: The 42d Air Base Wing of the United States Air Force at Maxwell Air Force Base has prepared an Environmental Assessment (EA), which is hereby incorporated by reference, in accordance with the National Environmental Policy Act (NEPA). As a result of a memorandum signed by President Obama in June 2010, the Air Force has implemented an initiative to reduce costs and energy usage throughout the Air Force. The overall goal of the Air Force "20/20 by 2020" initiative is to reduce both the "facility footprint" and facility operational costs by 20 percent by the year 2020.

Proposed Action and Alternatives: In order to meet the goals, Maxwell AFB Asset Management personnel have proposed a comprehensive Demolition and Consolidation effort (the "Proposed Action.") The Proposed Action seeks to dispose of unnecessary, unused, and unserviceable facilities, and consolidate units into serviceable facilities and more efficient work space. Approximately 50 facilities throughout Maxwell AFB and its Gunter Annex are proposed for demolition, with an average yearly reduction of 90,000 square feet of facility area. A phased approach has been formulated, taking place from 2013 through 2020. Some adjustments to the proposed timetable may be necessary as funding is available and consolidation moves are accomplished. All proposed demolitions would take place within the installation boundaries of Maxwell AFB and its Gunter Annex.

The Proposed Action also includes potential transfer of 8 facilities at Gunter Annex to the City of Montgomery. The facilities at Gunter are located on land leased by Maxwell AFB from the City of Montgomery. The lease would be terminated, and the facilities transferred to the City.

One airfield construction project is also included in the Proposed Action. A semicircular turnaround area has been proposed for construction on the southwest end of the main runway. The area to be paved with concrete directly adjoins the main runway and measures approximately 8,700 square yards.

If the demolitions are not undertaken (the "No Action Alternative"), the facilities would become too costly to maintain or renovate. It is likely that the occupants would eventually be relocated, the utilities would be either minimized or shut off, and the buildings would be closed to sit empty. The buildings would continue to deteriorate until they are unusable and possibly unsafe. Without a comprehensive plan for demolition and consolidation, the relocation of occupants could occur without adequate planning and potentially result in greater cost for multiple moves. The No Action Alternative would not meet Air Force goals or federal directives. However, inclusion of the No Action Alternative is prescribed by the CEQ regulations and, therefore, is analyzed within the EA.

The Proposed Action deals only with reduction in infrastructure in an effort to reduce energy usage and operation and maintenance costs. The Proposed Action does not include any planned or foreseeable reduction in workforce or changes in mission at Maxwell AFB or Gunter Annex.

Thirteen resource areas from the natural or human environment were considered for evaluation. Eight of the resources were carried forward for analysis, but five of the resource areas were eliminated from detailed analysis due to the lack of potential for significant impacts. After initial consideration, the resource areas eliminated from detailed study included: Biological resources, Land Use, Socioeconomic resources, Environmental Justice, and Transportation & Circulation. The EA contains the rationale for their exclusion.

The table below summarizes the findings for potential environmental impacts.

Summary of Findings for the Proposed Action and No Action Alternative

Summary of Findings for the Proposed Action and No Action Afternative				
Resource Area	Proposed Action	No Action Alternative		
Air Quality	Not Significant. Proposed Action would create minor, short-term increases in dust and air emissions during periods of demolition activity. Construction best management practices such as site watering would help reduce these emissions. Long-term emissions would decrease as facility boilers are removed with demolitions, resulting in minor beneficial impacts. No change in MAFB emission status.	Not Significant. Air emissions would decrease slightly as facilities are closed and boilers or other emission sources are minimized or inactivated. No change in MAFB emission status.		
Water Resources	Not Significant. Surface waters would be protected from potential runoff associated with demolition activities by the use of perimeter controls and other best management practices, as specified in the MAFB Storm Water Management Plan. Minor positive long-term impacts would be expected from demolition of impermeable surface area.	No Impact. No change to existing conditions.		
Soils	Not Significant. Demolition activity would create temporary soil disturbance. Erosion protection would be implemented and maintained according to the MAFB Storm Water Management Plan. Soils around building foundations would be analyzed for presence of pesticide (chlordane). If present, soil would be handled according to all applicable EPA and ADEM requirements.	No Impact. No change to existing conditions.		

Noise	Not Significant Tomporory increases in	No Impact No change to
Noise	Not Significant. Temporary increases in noise would occur near demolitions sites,	No Impact. No change to
	1	existing conditions.
	possibly resulting in potential annoyance and	
	localized speech interference. No long-term	
	impacts expected.	
Cultural Resources	Not Significant. Proposed demolition would	Not Significant. No
	include 1 facility that is potentially eligible	change to existing
	for the National Register of Historic Places	conditions. MAFB would
	(NRHP). Mitigation would include	continue to maintain the
	performing a Historic American Building	NRHP-eligible facilities,
	Survey to document the structure prior to	though at minimum
	demolition. Proposed property transfers	required levels.
	would transfer 3 NRHP-eligible properties to	
	the City of Montgomery. SHPO Consultation	
	and a Memorandum of Agreements for	
	continued preservation of the properties	
	would be completed, as applicable.	
Hazardous	Not Significant. Older facilities may contain	No Impact. No change to
Materials	asbestos-containing building materials or	existing conditions.
	lead-based paint. All hazardous materials	
	would be handled and disposed of in	
	accordance with state and federal regulations,	
	the MAFB Asbestos Management Plan and	
	MAFB Lead-Based Paint Management Plan.	
Solid Waste and	Not Significant. The Proposed Action would	No impact. No change to
Hazardous Waste	result in increased solid waste generation and	existing conditions.
	disposal. The North Montgomery	
	Construction and Demolition Landfill has	
	sufficient capacity to receive the demolition	
	waste. Any hazardous waste would be	
	handled according to current MAFB operating	
	procedures and all applicable state and federal	
	regulations. No change in MAFB generating	
	or regulatory status.	
Environmental	No impact. Proposed action is not expected	No impact. No change to
Restoration	to impact ERP sites or current remedial	existing conditions.
Program Sites	efforts.	existing conditions.
Infrastructure and	Not Significant. Demolitions would result in	Not Significant. As aging
Utilities	a decrease in utility usage, resulting in a	facilities become inactive,
Offices	minor beneficial environmental impact. No	utilities would be
	1	
	change to delivery systems or availability of	minimized, resulting in
	utility resources.	slight beneficial
		environmental impact.

Cumulative Impacts: Multiple construction projects could be underway simultaneously at MAFB and Gunter Annex, in the surrounding areas of Maxwell Boulevard, and in nearby downtown Montgomery. However, since the proposed demolitions would occur wholly within the installation boundaries, many of the resource areas would not overlap. Cumulative impact analysis did not reveal any concerns. When considered together with other known actions, the Proposed Action is not expected to contribute significantly to any long-term negative impacts.

Summary of Public Review and Interagency Coordination: Initial letters were sent on Dec. 26, 2012 to various governmental and agency personnel that might have an interest in the proposed action. Several agencies responded to these scoping letters, and responses received are included in Appendix A of the EA. A public review period was held August 25, 2013 through September 13, 2013 to solicit public comments on the draft EA. Notice was published in the local newspaper (Montgomery Advertiser), and the document was available for review at the Montgomery Public Library and Maxwell Air Force Base Air University Library for the entire public review period. The Proposed Action was also announced on local television. No public comments were received.

Finding of No Significant Impact: I have reviewed the facts and analysis in the accompanying Environmental Assessment (EA), which has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA), regulations promulgated by the President's Council on Environmental Quality (CEQ) and Title 32 Code of Federal Regulations, Part 989. I conclude that the Proposed Action will not have a significant direct, indirect, or cumulative impact upon the human or natural environment. Accordingly, the requirements of NEPA, the CEQ, and 32 CFR 989 et seq. have been fulfilled, and therefore, an environmental impact statement is not necessary and will not be prepared.

TRENT H. EDWARDS, Colonel, USAF

+ H & dwards

Commander, 42d Air Base Wing

19 Sep 2013

Date

FINAL ENVIRONMENTAL ASSESSMENT

PROPOSED DEMOLITION AND CONSOLIDATION AT MAXWELL AIR FORCE BASE, ALABAMA

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Acronyms and Abbreviations

42 CES/CEV 42d ABW Civil Engineer Squadron, Environmental Office AcMs Assessor-Containing Material ADEM Alabama Department of Environmental Management AcTC Air Education Training Command AF AF Air Force Base AF Air Force Delicy Directive AICUZ Air Installation Compatible Use Zone ANG Air National Guard APIMS Air Program Information Management Practices C&D construction and demolition CAA Clean Air Act CEQ Council on Environmental Quality CERCLA Comprehensive Environmental Response, Compensation, and Liability Act CFR Code of Federal Regulations CO Carbon monoxide CWA Clean Water Act GB Environmental Inpact Statement CO Executive Order EA Environmental Inpact Statement CO Executive Order EA Environmental Inpact Statement CO Executive Order EPA Environmental Protection Agency ERP Environmental Inpact Statement CO Executive Order EPA Environmental Inpact Statement CO Executive Order EPA Environmental Protection Agency ERP Enviro	42 ABW	42d Air Base Wing	MAFB	Maxwell Air Force Base
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PRIVACY ADVISORY

Your comments on this Draft Environmental Assessment (EA) are requested. Letters or other written or oral comments provided to Maxwell Air Force Base may be published in the Final EA. As required by law, comments will be addressed in the Final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a comment or to fulfill requests for copies of the Final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.

1 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

This Environmental Assessment (EA) examines the potential impacts to the natural and human environment resulting from proposed consolidation, demolition of excess facilities, and facility disposal at Maxwell Air Force Base (MAFB) in Montgomery County, Alabama (see Figure 1.1). This EA has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code 4321-4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations Parts 1500-1508), and 32 CFR Part 989 et seq., the Air Force Environmental Impact Analysis Process.

These regulations require federal agencies to evaluate the potential environmental impacts that may result from implementation of the proposed action or alternative actions. An EA may be prepared to:

- briefly provide sufficient analysis and evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI);
- aid in an agency's compliance with NEPA when an EIS is not necessary; and
- facilitate preparation of an EIS when one is necessary.

1.2 WHY IS THIS ACTION NEEDED?

In June of 2010, the Air Force and all federal agencies were charged by President Obama, through a signed memorandum, to work towards utilizing facilities more efficiently and disposing of unneeded real estate. This is to be accomplished through a focus on facility space, reducing energy and water consumption, and decreasing operating costs through condition-based operating cost assessment. Therefore, federal agencies, including the Air Force, would keep and maintain only those facilities necessary to conduct mission requirements, using its resources more effectively.

To ensure results, the Air Force (AF) has implemented a "20/20 by 2020" initiative to reduce AF Real Property and associated operating costs by 20% by the year 2020. Through an asset management approach, the Air Force will focus on space optimization, energy and water conservation, and assessment of facility conditions. (VCSAF 2011.)

1.3 WHAT ARE THE OBJECTIVES OF THE PROPOSED ACTION?

Maxwell Air Force Base is a US Air Force Base (AFB) under the Air Education and Training Command (AETC). The AF Baseline for 20/20 by 2020 is 401 million square feet (MSF) which was based on AF Real Property inventory as of Sep 30, 2006. Currently, the 20/20 by 2020 goal is to dispose of 80 MSF Air Force wide. Maxwell AFB is responsible for a reduction of 1.19 MSF total or 85 thousand square feet (KSF) annually. Table 1.1 shows property reduction goals for Air Force AETC bases.

Table 1-1 – AETC Property Reduction Goals

Base	Chosen Goal	Annual Goal	4-Year Goal
ALTUS	547	39.1	156
COLUMBUS	290	20.7	83
FAIRCHILD	0	0.0	0
GOODFELLOW	187	13.4	53
KEESLER	1,509	107.8	431
LACKLAND	2,654	189.6	758
LAUGHLIN	360	25.7	103
LITTLE ROCK	0	0.0	0
LUKE	725	51.8	207
MAXWELL	1,188	84.9	339
RANDOLPH	294	21.0	84
SHEPPARD	2,374	169.6	678
TYNDALL	636	45.4	182
VANCE	240	17.1	69
AETC	11,004	786.0	3144

*Provided by AETC HQ AETC/A7CPD 5 Oct 10

KSF = 1,000 Square Feet

The purpose of the proposed demolition and consolidation plan (referred to as the "Proposed Action") is to provide and carry out a plan for how Maxwell AFB will meet the 20/20 by 2020 mandate, demolishing or otherwise disposing of unneeded facilities, and consolidating operations within useable facilities.

1.4 HOW WERE THE PROPOSED ACTION AND ALTERNATIVES FORMULATED?

The proposed action should result in meeting the installation-wide, long-range goal for a 20% reduction in real property for the remaining years until the target year 2020. The preferred plan has been formulated using a current assessment of eligible facilities, using criteria such as space utilization, energy, and operation & maintenance (O&M) costs. The plan would then be used to program and budget for projects to consolidate or move building occupants and demolish buildings, based on approval by the installation's Space Utilization Board and Wing Commander.

The following categories of facilities are excluded from the 20/20 initiative; therefore, they do not count toward the reduction goals:

- -Non-Square-Foot facilities
- -BRAC-related facilities (Base Realignment and Closure)
- -Medical
- -Housing
- -Commissary-related facilities
- -AAFES-related facilities (Army-Air Force Exchange Service)
- -ANG (Air National Guard) & Reserve facilities
- -Government-owned, contractor-funded facilities
- -RDT&E (Research, Development, Test and Evaluation) and other-funded facilities
- -Leased, permitted, foreign-owned and NATO-funded facilities

Maxwell AFB has a large number of excluded facilities such as housing and buildings occupied by 908th Airlift Wing, an Air National Guard unit. Maxwell also has a large number of historical facilities. Historical facilities, depending on the facilities' functions, might be included in the 20/20 reduction goals. However, demolition of historical facilities would require additional approval and compliance with the National Historic Preservation Act.

Historic protected facilities account for 1.7 MSF, or 29%, of total installation footprint. All other 20/20 excluded facilities comprise 2.1 MSF of total base square footage. Figure 1-2 shows eligible and excluded facilities on Maxwell, and Figure 1-3 shows eligible and excluded facilities on Gunter Annex.

1.5 WHERE WILL THE PROPOSED ACTION TAKE PLACE?

The proposed action would take place wholly within the boundaries of Maxwell AFB and its Gunter Annex, which are located in Montgomery County, within the city limits of Montgomery, Alabama (Figure 1-1). Potential impacts have been considered for the installation, its immediate surroundings, and the Montgomery regional area, where applicable.

1.6 INTERGOVERNMENTAL, INTERAGENCY, AND PUBLIC INVOLVEMENT

Federal, state, and local agencies with jurisdiction that could be affected by the proposed or alternative actions have been notified and consulted. Interagency and Intergovernmental Coordination for Environmental Planning (IICEP) letters and responses are presented in Appendix A. This coordination fulfills Executive Order (EO) 12372, *Intergovernmental Review of Federal Programs*, July 14, 1982, which requires federal agencies to cooperate with and consider state and local views in implementing a federal proposal. EO 12372 is implemented by the Air Force in accordance with Air Force Instruction (AFI) 32-7060, Interagency and Intergovernmental Coordination for Environmental Planning.

Initial scoping letters were sent Dec. 26, 2012 to request input from governments, agencies, and organizations that may have an interest in the proposed action, and to identify potential environmental impacts. A sample scoping letter, list of recipients, and responses received are included in Appendix A.

The Draft EA and Draft Finding of No Significant Impact (FONSI) were made available to the public for review. A Public Notice of Availability was published in the local paper (Montgomery Advertiser) on August 25, 2013, and copies of the Draft EA were placed at the Montgomery Public Library and Air University Library. The Proposed Action was also announced on local television. The public comment period extended through September 13, 2013. No public comments were received.

1.7 THE DECISION AND THE DECISION MAKER

The environmental analysis in this document evaluates the potential environmental impacts of implementing the proposed action and the alternative of taking no action ("no-action alternative"). The Air Force will weigh the results of the environmental analyses presented in this EA as well as operational, economic, and other considerations when deciding whether to implement the proposed facility disposals.

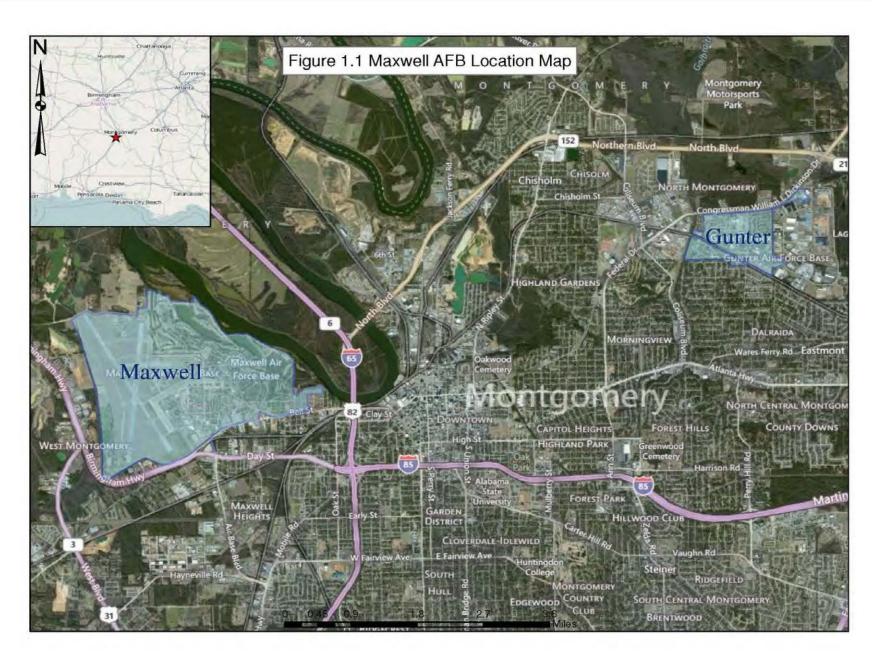


Figure 1-2 - Maxwell AFB Historic, Excluded, and Eligible Facilities







20/20 ELIGIBLE

Figure 1-3 - Gunter Annex Historic, Excluded, and Eligible Facilities





1.8 SCOPE AND ORGANIZATION OF THIS ENVIRONMENTAL ASSESSMENT

1.8.1 What is the Scope of This Environmental Assessment?

MAFB routinely evaluates facility conditions and occasionally carries out demolition of a few facilities that are not cost-effective to maintain or refurbish. However, this EA is being conducted to evaluate the scope of the entire proposed action, which includes multiple demolitions and facility disposals over a time period of several years. The EA evaluates these actions as a whole to assess the cumulative impact of the proposed facility disposals and demolitions.

This EA presents a systematic, interdisciplinary analysis of the potential impacts from implementing the proposed action or the alternative of taking no action. Both the proposed action and the no-action alternative are assessed for their potential long and short term impacts on society as a whole, the affected region and interests, and the locality.

Table 1.2 shows the environmental media and resources that have been considered for potential impacts due to this proposed action. Only those environmental resources that have the potential to affect, or be affected by, the proposed action or the no-action alternative were analyzed further.

Table 1-2 – Environmental Resources Evaluated

Environmental Media or Resource Area	Consideration for Analysis
Air quality, including greenhouse gases and climate change	Carried forward for analysis
Water resources	Carried forward for analysis
Geological resources	Only soils carried forward for analysis; no other geological resources impacted
Noise	Carried forward for analysis
Cultural and historical resources	Carried forward for analysis
Hazardous materials	Carried forward for analysis
Wastes (including hazardous wastes)	Carried forward for analysis
Infrastructure and utility systems	Carried forward for analysis
Biological resources	Eliminated from detailed study
Transportation and traffic circulation	Eliminated from detailed study
Land use	Eliminated from detailed study
Socioeconomic resources	Eliminated from detailed study
Environmental justice	Eliminated from detailed study

1.8.2 Why Were Some Resources Eliminated from Detailed Study?

1.8.2.1 Biological Resources

No federally-listed threatened or endangered species or critical habitat has been identified on MAFB or Gunter Annex (MAFB 2011c). The US Fish and Wildlife Service provided a response to the MAFB scoping letter, stating that they believe no adverse impacts would occur to listed species or critical habitat as a result of this activity. No state-protected species are known to occur on or adjacent to the proposed sites, or would be expected to be impacted by the proposed action. There would be no environmentally-sensitive areas, such as wetlands, affected by the proposed action. The biological resources impacted at the demolition sites would be limited to turf and landscaping around the proposed buildings. Trees would be retained where possible, and sites would be restored with sod or grass approved for planting on MAFB. The proposed action would not affect any known sensitive species of flora or fauna, nor would it result in degradation of the biological environment. Therefore, impacts would be negligible, so a detailed analysis was not performed.

1.8.2.2 Transportation and Circulation

Transportation effects would be considered significant if the proposed action resulted in considerable changes in traffic circulation or traffic volume within the region of influence (ROI). Adverse impacts might also be considered significant if existing roadways had to operate at or above their full design capacity as a result of an action. Potential additional traffic related to the proposed demolitions would comprise a very small percentage of the daily traffic for MAFB and the surrounding area. Base upon review and consideration of the 2009 MAFB Traffic Study, MAFB and adjacent public roadways have sufficient capacity to handle minor, temporary increases in traffic (MAFB 2009b). MAFB construction traffic routes and the commercial vehicle inspection station established for contractors and construction traffic would be used where necessary. Traffic impacts would be minimal; therefore, a detailed analysis was not performed.

1.8.2.3 Land Use

Proposed demolitions would create more open areas and "green space" within the current land use areas of MAFB. There are no proposed or foreseeable plans to replace the demolished facilities with new facilities; therefore, the proposed action would not change the current and surrounding overall land use areas. Any future proposed redevelopment would subsequently be evaluated in accordance with NEPA requirements, and would be evaluated for land use compatibility and compatibility with MAFB General Plan.

1.8.2.4 Socioeconomic Resources

Socioeconomic impacts are assessed in terms of direct effects on the local economy and population, and related indirect effects on other socioeconomic resources within the ROI. Socioeconomic impacts would be considered significant if the proposed action resulted in a

substantial shift in population trends, or if the proposed action would notably affect regional employment, earnings, or community resources such as schools. The ROI consists of the Montgomery Metropolitan Statistical Area.

The proposed action would not change the population of the installation or surrounding area. Increased employment from short-term demolition contracts would be expected to have a slight positive impact, but it would be a minimal impact on regional socioeconomic conditions or employment. Economic impacts from discontinuing operation or maintenance of demolished buildings would likewise have minimal impact on MAFB and the ROI. Though the proposed action would reduce needed facility maintenance, there are no foreseeable plans to reduce the operations and maintenance workforce. Proposed demolitions would not create a shortage of housing for Air Force personnel. Therefore, a detailed analysis was not performed.

1.8.2.5 Environmental Justice

In order to comply with EO 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, and EO 13045, Protection of Children from Environmental Health Risks and Safety Risks, areas containing relatively high disadvantaged or youth populations are given special consideration. Impacts from proposed demolition would be largely confined to MAFB, where there are no minority, low-income, or youth populations that would be disproportionately impacted. The impacts associated with the proposed action are short-term in nature and would not contribute to negative cumulative effects for environmental justice populations. Therefore, a detailed analysis was not performed.

1.8.3 How is This Environmental Assessment Organized?

This EA is organized into six main sections. **Chapter 1** of this document introduces the background, the need, and the purpose of the proposed action. **Chapter 2** provides a detailed description of the proposed action and the no-action alternative. **Chapter 3** presents a survey of the affected environment as it currently exists. Only those environmental resources that would affect, or be affected by, the proposed action or the no-action alternative are described in detail. Each environmental resource area described in Chapter 3 will have a corresponding section in **Chapter 4**, which describes and analyzes changes to the environment that would result from implementing the proposed action or the no-action alternative. In addition, Chapter 4 addresses the potential for positive or negative impacts of implementing these changes. The environmental resources are analyzed to a level of detail corresponding to the magnitude of the anticipated potential effects. **Chapter 5** includes an analysis of potential cumulative, irreversible, and irretrievable impacts associated with implementing the proposed action. **Chapter 6** provides the names of the interdisciplinary team members responsible for preparing this EA, and lists the sources of information used in the preparation of the document.

Appendix A contains a summary of public involvement in the NEPA process. Documents include a copy of the IICEP scoping letter mailed to agencies, the IICEP distribution list, responses to the IICEP letter, and related correspondence. **Appendix B** contains correspondence with the State Historic Preservation Office, and **Appendix C** contains other supporting documentation.

1.9 APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION

The proposed action may affect resources under the jurisdiction of other federal agencies. . Consultation with the State Historic Preservation Office (SHPO), pursuant to Section 106 of the National Historic Preservation Act, is required for actions that may have an effect on archeological or historical resources that have been, or may be, eligible for listing on the National Register of Historic Places. Coordination with the U.S. Army Corps of Engineers (USACE), pursuant to Section 404 of the Clean Water Act (33 USC 1251 *et seq.*, June 30, 1948, as amended February 4, 1987), is necessary if the proposed action is likely to affect wetlands or waterways under USACE jurisdiction.

Certain actions also require notification to, or permitting through, the Alabama Department of Environmental Management (ADEM). These may include storm water permitting, demolition and asbestos abatement. The MAFB Civil Engineering Squadron and its Environmental Office, 42 CES/CEV, have established procedures in place to ensure that necessary permitting or required notifications are completed prior to work start.



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2 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 WHAT IS THE PROPOSED ACTION?

The agency's preferred alternative, also known as the proposed action, would be to dispose of excess facilities and consolidate occupancy, accomplished through a phased approach, averaging an annual reduction of 84.9 KSF. An assessment of data including current and projected O&M costs, facility utilization, energy consumption, and overall Base General Plan was considered for phasing. The plan was based on a near term, mid-term, and long-term approach. Near term includes actions that are most likely, and are scheduled to occur between FY13-FY14. Mid-term actions are feasible but require more development, and are scheduled for FY15-FY17. Long-term actions are fluid, with little specific planning to date, but are projected for FY18-FY20. The table below shows the proposed phasing from 2013 until target year of 2020.

Table 2-1 – Proposed Phasing of Demolition/Disposal

	Annual Target (KSF)	Annual Pgrm'd (KSF)	Cumulative Target (KSF)	Cumulative Programmed (KSF) ¹	Pgrm'd % to Goal	Demo Cost (\$K)	Consolidation Cost (\$K)
FY13	85	105	595	519	44%	2,298	1,485
FY14	85	180	680	699	59%	479	6,360
FY15	85	181	765	880	74%	1,885	8,640
FY16	85	36	850	916	77%	472	742
FY17	85	29	935	945	79%	664	460
FY18	85	14	1020	959	81%	359	1,646
FY19	85	64	1105	1023	86%	312	1,742
FY20	85	70	1190	1093	92%	1,160	5,588
Totals	85	719	1190	1093	92%	9,185	26,863

¹ – Baseline for Cumulative Programmed was 414 KSF, taking into account demos completed prior to 2013. (Warnock, 2013)

2.2 HOW WAS THIS OPTION SELECTED?

After evaluating Maxwell's facilities according to the eligibility discussed in section 1.4, MAFB Asset Management personnel and Space Utilization Board formulated a demolition and consolidation plan, which is the agency's preferred alternative. Each building eligible for demolition was assessed on: age, historical significance, general O&M history, renovations required in the future, whether the facility is suitable for occupants, and how complicated a consolidation move of occupants would be. These factors were evaluated to prioritize the organizations to be relocated and buildings to be demolished. Table 2-3 outlines the 20/20 by 2020 plan by fiscal year. Some adjustments to the proposed timetable may be necessary as funding is made available and as consolidation moves are accomplished.

Most of the facilities listed would be demolished, but several facilities noted below are proposed for disposal by transfer to another owner, as discussed further in section 2.5.

2.3 CONSOLIDATION

The proposed 20/20 demolition plan would require current occupants of the buildings slated for demolition to be relocated. Relocations and space allocations for the near-term actions have been proposed, with relocations for the long-term actions still in the planning stages.

Relocations will require some expenditure to ensure that the new facilities are equipped to enable the units and agencies to carry out their mission effectively. Compatibility with surrounding facilities, land use, and mission effectiveness are considered when planning the relocations. Table 2-3 indicates some of the proposed relocations.

2.4 OTHER PROPOSED ACTION

2.4.1 Minor Airfield Pavement Modification

In addition to the demolition activity, a modification is proposed on the approach to runway 33. A semi-circular turn-around area has been proposed at the south end and at the west side of the main runway. The area to be paved with concrete directly adjoins the main runway. It measures approximately 52 yards wide and 167 yards long, for an area of approximately 8,684 square yards.

2.4.2 Abandoned Airfield Fuel Pipeline Removal

On the southwest side of the airfield, there is approximately 7000 linear yards of abandoned fueling pipeline that was once used for transfer of JP4 aviation fuel. This piping is to be removed in compliance with all applicable regulations for closure of this previous fueling system.

2.4.3 Other Facility Demolition

Other facilities proposed for demolition may include small, temporary storage sheds, utility buildings, or other supporting structures associated with the facilities proposed for demolition. These additional demolitions would be minor, and are not included toward the 20/20 reduction goals.

2.5 PROPOSED PROPERTY TRANSFERS

Facilities 900, 902, 904, 905, 906, 907, and 910 on Gunter Annex are facilities in the northeast corner of Gunter Annex that are located on a parcel of land currently leased from the City of Montgomery. The proposed action calls for the lease to be terminated, and these facilities located on the leased land to be transferred to the City of Montgomery.

Facility 900 was constructed in 1929, and was a post-World War I airport hangar associated with the previous Montgomery airport. This facility is eligible for inclusion on the National Register of Historic Places.

Facilities 902, 904, 905, 906, and 907 are recreational facilities associated with the Gunter swimming pool. The original pool (902) and bathhouse (904) were constructed in 1929, and are also eligible for inclusion on the National Register of Historic Places. These facilities are discussed in more detail in section 3.7.

Facility 910 at Gunter Annex, a current warehouse/storage facility is also proposed for transfer to the City of Montgomery. It has no historic significance.

Table 2-2 – Projected Property Disposal by Year

Fiscal	Buildings Proposed for Demolition/Disposal	Approx. Area	Proposed New
Year		Square Feet	Location
2013	M26, M27 (Base Theater)	19,000	None
	M695, M699 (Lodging)	50,000	None
	M926 (Air University/Public Affairs Multimedia)	8,000	M45
	G302, G307 (Falcon's Nest/Non-Appropriated Funds storage)	28,000	None
2014	M40 (Post Office)	13,000	M851
	M1036 (Marketing/Civil Engineer Squadron)	10,000	M1067/1060
	M1073, M1074, M1075 (Security Forces Storage)	8,000	TBD
	M1450, M1451 (Air University)	13,000	M1401/M1405
	G322 (1 st Sergeant Academy)	14,000	G1143
	G1014, G1015, G1016, G1411 (Lodging)	122,000	None
2015	M803 (Air University)	45,000	M835 & 836
	M902 (Air University)	8,000	Academic Circle
	M914 (Vet/Dry Cleaners/Airman's Attic)	28,000	M851
	M1033 (Holm Center/Force Support Services Storage)	12,000	M836
	G1510, G1511, G1512 (Recruiting, Military Entrance Processing)	88,000	M500
2016	M711 (Civil Air Patrol/Office of Special Investigations)	12,000	TBD
	M742 (Community Center)	24,000	TBD
2017	M903 (908 th Airlift Wing)	8,000	TBD
ı	G847 (Printing Plant)	21,000	TBD

Table 2-2, Continued

Fiscal	Buildings Proposed for Demolition/Disposal	Approx. Area	Proposed New
Year		Square Feet	Location
2018	M18 (Chapel Singles Ministry)	3,000	M155
	G850 (Gym Annex/Thrift Store)	11,000	TBD
2019	M677 (Family Readiness/Support)	11,000	TBD
	G900 (Secretary of the Air Force Finance – Real Property Transfer	27,000	TBD
	to City of Montgomery)		
	G910 (Force Support Services Storage – Real Property Transfer to	12,000	TBD
	City of Montgomery)		
	G902, G904, G905, G906, G907, G908 (Swimming Pools,	14,000	None
	Bathhouse, and related recreational facilities – Real Property		
	Transfer to City of Montgomery)		
2020	M1 (Youth Center)	27,000	TBD
	M912 (Base Laundry)	20,000	TBD
	M1110 (Hopper Lodge)	4,000	TBD
	M1425 (Ritchie Center)	19,000	TBD

(Warnock, 2012; Riley 2013)

2.6 PROPOSED ALTERNATIVES

Many options were considered during the planning, selection and phasing process. The MAFB Asset Management team and Space Utilization Board evaluated the age of the facilities, condition of the facilities, cost to maintain or renovate the facilities, occupancy, and ease of renovations or relocations. As mentioned in section 1.3, buildings eligible for demolition were somewhat limited. Therefore, as Asset Management personnel formulated the plan and worked with the various units and organizations, the plan was revised along the way to accommodate the most feasible alternatives for moves and consolidation. Due to the numerous factors involved in identifying the consolidation moves and buildings eligible for demolition, there were no alternative comprehensive plans presented for meeting the 20/20 goals. All proposed alternative actions would have consisted of various combinations of the aging facilities or varying timetables for the demolitions, with little substantive change to the proposed action. According to the Air Force mandates, failing to work towards the Air Force's 20/20 by 2020 goals would not be an acceptable option for the various Air Force installations.

2.6.1 Description of the "No Action" Alternative

The No-Action Alternative would consist of no demolition or disposal of facilities on the installation. As older, failing buildings become more costly to maintain and renovate, it is likely that the occupants will eventually be relocated, the utilities would be either minimized or shut off, and the buildings would be closed to sit empty. Without a comprehensive plan for demolition, the relocation of occupants could occur without adequate planning and result in greater cost for multiple moves. The No-Action Alternative would not meet the Air Force goals or federal directives. However, inclusion of the No-Action Alternative is prescribed by the CEQ regulations and, therefore, will be carried forward for further analysis.



Maxwell facility # 902 is proposed for demolition

3 AFFECTED ENVIRONMENT

3.1 INTRODUCTION TO CURRENT CONDITIONS

Chapter 3 describes the current conditions of the environment, either man-made or natural, that would potentially be affected by implementation of the proposed action or alternatives. By describing the current environment, a framework, or baseline, is established for understanding potential changes to the environment if the proposed action or one of the alternatives is carried out. This chapter focuses on the current conditions at Maxwell AFB, Gunter Annex, and, where applicable, in the surrounding community. Potential impacts may be direct, indirect, or cumulative changes to the existing conditions. The baseline conditions presented in this chapter are described to the level of detail necessary to support analysis of potential impacts presented in Chapter 4, "Environmental Consequences."

As directed by guidelines contained in NEPA, CEQ regulations, and 32 CFR 989, *Environmental Impact Analysis Process*, the description of the affected environment focuses only on those resource areas potentially subject to impacts and should be commensurate with the anticipated level of environmental impact. As outlined in Section 1.8, thirteen resource areas associated with the affected environment were considered, but only eight of the resource areas were carried forward for additional analysis. The others were eliminated from detailed study because of the lack of potential for significant impacts.

The sections for each resource topic begin with an introduction that defines the resources addressed in the section, summarizes applicable laws and regulations, defines key terms as necessary, and describes the region of influence (ROI) within which the effects from implementation of the various alternatives are anticipated to occur. The ROI varies from resource to resource, but in general, effects from the proposed activities are expected to be largely concentrated within MAFB, with a few resources influencing the City of Montgomery or the Montgomery Metropolitan Statistical Area (MSA) as the ROI.

3.2 INSTALLATION LOCATION, HISTORY, AND CURRENT MISSION

Maxwell AFB is a United States Air Force education and training base under the Air Education and Training Command, and headquarters to the 42d Air Base Wing (ABW) and Air University (AU). Maxwell AFB's primary mission is to provide support to AU, the professional military education center of the Air Force. Maxwell AFB is located in Montgomery County, within the city limits of Montgomery, Alabama, and includes the main base and Gunter Annex (Figure 1-1). Gunter Annex was formerly Gunter AFB until it was consolidated with Maxwell AFB in 1991. The main base consists of approximately 2,475 acres located in the northwestern section of the City of Montgomery, Montgomery County, Alabama.

Portions of the property comprising Maxwell AFB have been associated with aviation since the beginning of heavier-than-air powered flight. Orville Wright established Wright Field as a flying school in the spring of 1910 and, in 1918, the United States purchased Wright Field as part of a 302-acre parcel to be used as a repair depot for air training aircraft. In 1946, Air University was established, and Maxwell AFB became the center for Air Force professional military education.

The host unit for Maxwell AFB and Gunter Annex is 42d ABW, which is responsible for providing base-level services and support. Tennant organizations at Maxwell AFB are the United States Air Force Historical Research Agency, the Community College of the Air Force, the Headquarters Air Force Reserve Officer Training Corps, the Maxwell Federal Prison Camp, Civil Air Patrol, and several other organizations. Schools at Maxwell AFB and its Gunter Annex offer education, graduate education, and professional continuing education for officers, noncommissioned officers, and civilians to prepare them for command, staff, leadership, and management responsibilities. In addition, AU is responsible for research in designated fields of aerospace, education, leadership, and management, and contributes to the development and testing of Air Force doctrine, concepts, and strategy (USAF, 1994).

3.2.1 Maxwell Main Base

The base is largely developed with buildings and facilities. Housing, a golf course, and the principal academic buildings associated with Air University occupy the eastern portion of the base. Hangars, administrative offices, and other support buildings make up the southern central portion. Runways, taxiways, and landing fields are located to the west, and a federal prison camp lies to the north. Near the western boundary, beyond the airfield, is a large, open area for recreational activities. The Alabama River forms the base's northeastern boundary, and adjacent to the eastern boundary is the vacant property formerly known as Riverside Heights.

3.2.2 Gunter Annex

Gunter Annex, consisting of 373 acres, lies approximately six miles east of Maxwell in the northeastern portion of the City of Montgomery. U.S. Highway 231 forms the northern boundary. Gunter Annex was the original site of the Montgomery Airport, which was established in 1929. Montgomery Airport became Gunter Field in 1940 as a training site for pilots during World War II. During the 1940's, Gunter Field grew to about 1,200 acres, with the majority of land leased from the City of Montgomery. In 1941, Gunter Field was capable of supporting 24-hour-a-day flight operations for 300 aircraft. In 1945, flight training at Gunter Field ceased, and in 1949, all flying at Gunter Field terminated. Under the Air Force, Gunter Field became Gunter Air Force Base in 1948.

In 1971, approximately 800 acres of leased land adjoining the eastern side of the base were returned to the City of Montgomery. This parcel of returned land included the former runways, and is now the Gunter Industrial Park. In 1973, Gunter AFB was re-designated Gunter Air Force Station (AFS). Gunter AFS was consolidated with Maxwell AFB in 1991 and is now known as

Maxwell AFB, Gunter Annex. Gunter's main mission is to support the academic mission of Maxwell's Air University and associated training schools, and to support the Air Force combat support information systems.

Currently, Gunter Annex is mostly developed with buildings and facilities that include housing within the northeastern and northwestern portions, and administrative and support buildings throughout the southeast and north central portion of the annex. To the far northeast are remnants of the former municipal airport along with a swimming pool complex that is located on 17 acres of land leased from the City of Montgomery.

WHAT ARE THE CURRENT CONDITIONS OF THE AFFECTED ENVIRONMENT?

3.3 AIR QUALITY

3.3.1 Definition of Resource and Region of Influence

Air quality in a particular region can be described in terms of the type and quantity of pollutants in the air in a given time period. The size of pollutant particles is also a factor in measuring the air quality. Other factors contributing to air quality can include the size and topography of the air basin, as well as regional and seasonal weather conditions such as temperature, humidity, and wind.

The US Environmental Protection Agency (EPA) has established national ambient air quality standards (NAAQS) under the Clean Air Act Amendments of 1990 (CAAA). The CAAA specifies two sets of standards – primary and secondary – for each regulated air pollutant. Primary standards define levels of air quality necessary to protect public health, including the health of sensitive populations such as people with asthma, children, and the elderly. Secondary standards define levels of air quality necessary to protect against decreased visibility and damage to animals, crops, vegetation, and buildings.

Federal air quality standards are currently established for six pollutants (known as criteria pollutants), including: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), sulfur oxides (SO_x, commonly measured as sulfur dioxide – SO₂), lead, particulate matter equal to or less than 10 micrometers in aerodynamic diameter (PM₁₀) and particulate matter equal to or less than 2.5 micrometers in aerodynamic diameter (PM_{2.5}). Although O₃ is considered a criteria pollutant and is measurable in the atmosphere, it is often not considered as a pollutant when reporting emissions from specific sources, because O₃ is not typically emitted directly from most emissions sources. It is formed in the atmosphere from its precursors – nitrogen oxides (NO_x) and volatile organic compounds (VOCs) – that are directly emitted from various sources. Thus, emissions of NO_x and VOCs are commonly reported instead of O₃.

The NAAQS for the six criteria pollutants are shown in Table 3-1. Units of measure for the standards shown in this table are micrograms per cubic meter of air $(\mu g/m^3)$, parts per million (ppm) by volume, or parts per billion (ppb) by volume.

The USEPA also classifies the air quality within an Air Quality Control Region (AQCR) according to whether the region meets federal primary and secondary air quality standards. An AQCR or portion of an AQCR may be classified as attainment, non-attainment, or unclassified with regard to the air quality standards for each of the six criteria pollutants. "Attainment" describes a condition in which standards for one or more of the six pollutants are being met in an area. The area is considered an attainment area for only those criteria pollutants for which the national standards are being met. "Nonattainment" describes a condition in which standards for one or more of the six pollutants are not being met in an area. "Unclassified" indicates that air quality in the area cannot be classified and the area is treated as attainment. An area may have all three classifications for different criteria pollutants.

Air quality management at Air Force installations is established in AFI 32-7040, Air Quality Compliance. AFI 32-7040 requires installations to achieve and maintain compliance with all applicable federal, state, and local standards. Air quality compliance involves prevention, control, abatement, documentation, and reporting of air pollution from stationary sources and mobile sources if located in nonattainment areas. Maintaining compliance with air quality regulations may require reduction or elimination of pollutant emissions from existing sources and control of new pollution sources.

Region of Influence. Potential emissions from the proposed and alternative actions would occur primarily from site activities such as bulldozing, grading, and equipment operation at Maxwell AFB. Thus, emissions would be localized within the area surrounding the base. For this reason, the ROI is defined as the Montgomery Metropolitan Statistical Area (MSA), which includes Autauga, Elmore and Montgomery Counties, instead of the entire AQCR 2 that covers a large geographical area. Analysis of potential impacts is limited to the Montgomery MSA.

Table 3-1
National Ambient Air Quality Standards

Pollutant	Standard Value	Standard Type		
CO				
1-hr average	35 ppm	Primary		
8-hr average	9 ppm	Primary		
Lead				
Rolling 3-mo. average	$0.15 \ \mu g/m^{3(1)}$	Primary		
NO_2				
Annual average	53 ppb ⁽²⁾	Primary and secondary		
O_3				
8-hr average	75 ppb ⁽³⁾	Primary and secondary		
PM_{10}	_			
24-hr average	150 μg/m ³	Primary and secondary		
PM _{2.5}	3.7	Deignam and Casandam.		
24-hr average	35 $\mu g/m^3$	Primary and Secondary Primary/Secondary		
Annual average	$12/15 \mu g/m^3$	1 Timai y/Secondar y		
SO_2	(1)			
1-hr average	75 ppb ⁽⁴⁾	Primary		
3-hr average	0.5 ppm	Secondary		

CO=carbon monoxide NO_2 =nitrogen dioxide O_3 =ozone

 SO_2 =sulfur dioxide $\mu g/m^3$ =micrograms per cubic meter $PM_{2.5}$ =particulate matter equal or less than 2.5 micrometers in diameter PM_{10} = particulate matter equal or less than 10 micrometers in diameter

- (1) Final rule signed October 15, 2008. The 1978 lead standard (1.5 μ g/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- (2) The official level of the annual NO_2 standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard.
- (3) Final rule signed March 12, 2008. The 1997 ozone standard (0.08 ppm, annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years) and related implementation rules remain in place. In 1997, EPA revoked the 1-hour ozone standard (0.12 ppm, not to be exceeded more than once per year) in all areas, although some areas have continued obligations under that standard ("anti-backsliding"). The 1-hour ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is less than or equal to 1.
- (4) Final rule signed June 2, 2010. The 1971 annual and 24-hour SO_2 standards were revoked in that same rulemaking. However, these standards remain in effect until one year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved.

Table Source http://www.epa.gov/air/criteria.html December 14, 2012

3.3.2 Existing Air Conditions

3.3.2.1 Regional Climate. Weather and climate conditions have a significant effect on a region's air quality. Maxwell AFB has a humid subtropical climate, with short, relatively mild winters and long, warm summers. Humidity and annual rainfall are relatively high, with moisture being generated by thunderstorms and tropical storms during the spring, summer, and fall months.

The average temperature during the summer months is 81°F, with record extremes of 49°F and 105°F. The average temperature during the winter months is 49°F, with record extremes of 0°F and 85°F. Maxwell AFB averages 77 days per year with temperatures above 90°F. Subfreezing temperatures occur an average of 40 days per year.

The prevailing wind direction is generally from the northwest in winter and spring, and from the south in summer and fall. The average wind velocity is 7 miles per hour (mph), with a maximum-recorded 5-second wind speed of 73 mph. Thunderstorms occur an average of 58 days per year, with only 10 percent occurring during winter months. Maxwell AFB experiences on average 108 clear days and 150 cloudy days per year, with the remaining 107 days of the year being partly cloudy. Fog, with accompanying visibility of less than or equal to ¼ mile, occurs an average of 22 days per year, with extremes of 4 days per month in December and January.

3.3.2.2 Regional Air Quality. Maxwell AFB is located within the Columbus-Phoenix City Interstate AQCR 2, specifically Montgomery County. The air quality in the region is generally good. All 23 counties within AQCR 2 are classified by the USEPA as "attainment" or "unclassified" for all criteria pollutants.

Maxwell AFB and Gunter Annex are not close to any areas designated as "PSD Class I" areas, which are special areas, such as national parks or wilderness regions, where appreciable deterioration in air quality is considered significant.

3.3.2.3 Maxwell AFB Air Quality. An accurate emissions inventory is needed for assessing the potential contribution of a source or group of sources to regional air quality. An emissions inventory is an estimate of the actual and potential pollutant emissions generated by a source or sources over a period of time, normally a calendar year. The inventory accounts for permitted sources that are required to report annual emissions to ADEM, located in Montgomery County. Stationary emission sources at Maxwell AFB include boilers, generators, surface coating, paint booths, storage tanks, fueling operations, and woodworking operations, among others. Mobile emission sources are not included in the emission totals for Maxwell AFB. Table 3-2 compares the 2009 actual and potential emissions for Maxwell AFB and the 2009 Montgomery County emissions. As shown in Table 3-2, Maxwell AFB contributes an insignificant amount to the Montgomery County emission totals.

Table 3-2	
Montgomery MSA Emissions and Maxwell AFB Actual ^A and Potential ^B Emi	issions

		Annual Emissions (tpy)							
	CO	VOC	NOx	SO ₂	PM_{10}				
2009 Montgomery Metropolitan Statistical Area ^c	1049	1156	551	5,505	182				
2009 Maxwell AFB Actual Emissions ^d	0.1783	0.0452	0.8042	0.0352	0.0373				
2009 Maxwell AFB Potential Emissions ^d	3.0201	0.2093	3.7811	0.0228	0.2892				

tpy = tons per year

- A Actual emissions are the air pollutant emissions that result from the actual operation and material usage quantities during a one-year period (i.e., typically a calendar year).
- ^B Potential emissions are those emissions resulting from the operation of an emission unit under maximum potential conditions, unless operation is restricted by a regulatory condition (e.g. fuel use limit in permit). For example, calculating emissions from a boiler by taking into account its maximum rated heat input capacity and operation 24 hours per day, 7 days per week, 52 weeks per year would result in a potential emission calculation.
- Montgomery County 2009 ADEM Air Division Title V permitted emissions. Source: ADEM Air Division (Tate, Control Strategies Section Planning Branch Air Division 2012)
- d 2009 Air Emissions Inventory for Maxwell Air Force Base (APIMS). Includes the emission totals from Gunter Annex. Lead is not reported due to the lack of lead generating operations (i.e. soldering), or is not measurable in tons at this scale.

3.4 WATER RESOURCES

3.4.1 Definition of Resource and Region of Influence

The Clean Water Act (CWA) of 1972 (33 USC 1251 et seq.) is the primary law that protects the nation's rivers, streams, lakes, wetlands, and coastal area. Authority for some regulated activities under the CWA has been delegated to the US Army Corps or Engineers or to state environmental agencies. Under the CWA, the National Pollutant Discharge Elimination System (NPDES) permit program regulates sources of discharges, such as pipes or man-made ditches that discharge water and substances into waters of the United States. In Alabama, NPDES permitting authority has been delegated to the State of Alabama through the Alabama Department of Environmental Management (ADEM).

Maxwell Air Force Base and the Gunter Annex are classified as small municipal separate storm sewer systems (MS4s) as defined in 40 CFR Part 122.26(b)(16). This classification allows the Base to discharge all storm water runoff from these properties in accordance with the NPDES

General Permit for MS4s. The permit is in accordance with and subject to the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (the "FWPCA"); the Alabama Water Pollution Control Act, as amended, code of Alabama 1975, §§22-22-1 to 22-22-14 (the "AWPCA"); the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-15; and rules and regulations adopted thereunder. Maxwell and Gunter Annex are authorized to discharge into the Waters of the State of Alabama, subject to the terms and conditions set forth in their permits.

Region of Influence. Impacts from construction or demolition would normally be confined to the MAFB and Gunter Annex properties and associated drainage ways, extending to nearby City of Montgomery drainage ways and the Alabama River. If there were notable impacts to the Alabama River, the ROI could extend downriver in the Alabama River basin. However, since impacts are expected to be minor and localized, the ROI for this assessment has been limited to the installation and immediately surrounding drainage areas. The proposed demolition activities would not usually encounter groundwater, so no impact to groundwater resources would be expected.

3.4.2 Existing Water Conditions

Maxwell AFB and the Gunter Annex both contain large areas of hard surfaces that include, but are not limited to: building roofs, parking lots, sidewalks, runways, aprons, and landscaped areas. Storm water runoff from these areas goes through a network of inlets, drains, storm water channels, ditches and oil/water separators. Due to the large amount of impermeable surfaces throughout the Maxwell AFB and Gunter Annex properties, the volume of storm water runoff is relatively high.

3.4.2.1 Surface Water and Drainage. Maxwell AFB is located within the Alabama River Basin drainage and all runoff is eventually discharged to the nearby Alabama River. The Gunter Annex surface water is directed primarily overland and through base infrastructure into Three Mile Branch towards the west and into City of Montgomery infrastructure to the east. There are no pre-treatment systems associated with either storm water infrastructure.

Three Mile Branch, which is adjacent to the western installation boundary at Gunter, is listed on the EPA listing for impaired waterways, which is known as the 303(d) list. The impairment to Three Mile Branch is caused by off-site sources that have contributed contaminants of dieldrin, pathogens and siltation (which causes habitat alteration). It is the Air Force's responsibility to monitor storm water run-off from Air Force property to ensure that conditions meet and are in accordance with the NPDES general permit. Currently, no sampling and/or testing of storm water discharges are required for either the Maxwell property or the Gunter property. Copies of the NPDES permits are located in the Maxwell AFB Environmental office (42 CES/CEV), which oversees the Base's Storm Water Management Program. A copy of this Maxwell AFB Storm Water Management Program is also located in the 42 CES/CEV office.

3.4.2.2 Maxwell Groundwater Conditions. There is a known area of contaminated groundwater underneath a portion of MAFB and a large area off-base, south of the installation. The main contaminants in the water are chlorinated solvents, and the main plume of contaminated groundwater is found 25-50 feet below grade. Past on-base and off-base activities may have contributed to the groundwater contamination. Ongoing source area characterization work is underway to determine if any previously unidentified sources may exist. According to the risk analysis report, the chemicals in the groundwater beneath the base could be harmful if consumed or contacted by people, plants, or animals, but there is currently no known complete exposure pathway that would expose base occupants to the contaminants. The remedial action agreed to in the Record of Decision is for long-term monitoring and hot-spot treatment in certain areas. There are no wells on MAFB that draw groundwater for human consumption, and groundwater disturbance in these areas is prohibited. Therefore, there are no known pathways of human exposure to this groundwater. Additional information concerning the area groundwater conditions can be obtained from the Maxwell AFB Environmental Restoration Program (ERP) office, 42 CES/CEAN.

3.4.2.3 Gunter Groundwater Conditions. At Gunter, there are four former ERP sites within the Gunter property limits that have been associated with potential groundwater contamination below grade. All of these previous ERP sites have a "closed" status with a restriction classification of "groundwater disturbance prohibited". However, there are no known past or current conditions on Gunter Annex that would provide a pathway by which people would be exposed to the groundwater. All potable water is provided by the City of Montgomery municipal water system, and wells for drinking water are prohibited on Gunter. Information pertaining to these closed sites can be found through the MAFB ERP office, 42 CES/CEAN.

3.5 SOILS

3.5.1 Definition of Resource and Region of Influence

Geological Resources are defined as the geology, soils, and topography of a given area. No unique geologic features or geologic hazards are present on the MAFB properties, and the proposed demolitions would not affect the geologic units underlying the installation, so the evaluation has been limited to soil impacts.

Excessive erosion of soil materials can lead to stressed vegetation and undermining of structural foundations. Eroded material can also be carried by storm water runoff to wetlands, streams, and lakes, causing significantly degraded habitats and water quality. Chemical contaminants attached to soil particles can also be transported with eroded soils, causing further degradation.

Region of Influence. Since the proposed actions and expected impacts are generally confined to surface disturbance, the ROI for soil has been limited to the Maxwell and Gunter properties, with

discussion about prevention of erosion and siltation into surrounding drainage ways or waterways.

3.5.2 Existing Soil Conditions

Six soil associations have been mapped at MAFB, most of which are acidic, sandy loam or sandy clay soils. The majority of the installation consists of the Amite-Cahaba association which is deep, well-drained, fine sandy loam typically found on level to sloping uplands of high stream terraces. The Cahaba-Wickham-Roanoke association is found along the north and west base boundary, which is typically found on level to gently-sloping lowlands of floodplains and low stream terraces. Sandy and gravelly soils are found in some areas closer to the river.

Historical and general soils conditions on the Gunter Annex property consist of soils in the Amite series, a reddish-brown to grayish-brown friable, sandy clay loam.

Due to years of construction and redevelopment since the 1920s, soils on the installation in the developed areas will vary across the site due to mixing, grading and filling with soils from on-site and off-site sources. This is especially true of soils that are close to the surface around the buildings proposed for demolition. Since area soils may tend to be friable and highly erodible, all construction activities on MAFB must implement best management practices to prevent erosion and siltation into waterways due to storm water runoff.

Chlordane had been used on Maxwell AFB as a pesticide prior to its EPA ban in 1989. For any facility proposed for demolition that was constructed before 1990, the MAFB Environmental Office requires that soils around the building foundations be tested for the presence of chlordane. This is addressed more thoroughly in Section 3.8.2, *Pesticides*.



Maxwell facility #677 is proposed for demolition

3.6 NOISE

3.6.1 Definition of Resource and Region of Influence

Noise is sound that, if loud enough, can induce hearing loss and can be undesirable if it annoys people due to interference with ordinary daily activities, such as communication or sleep. A person's reaction to noise varies according to the duration, type and characteristics of the source, distance between the source and receiver, receiver's sensitivity, background noise level, and time of day.

Region of Influence. The proposed demolitions would occur at various locations throughout MAFB and Gunter Annex; therefore, the noise impact would not be centered in one geographic location. The ROI is defined as the Maxwell and Gunter properties and their immediate vicinity.

3.6.1.1 Measurement of Sound. The unit used to measure the intensity of sound is the decibel (dB). When describing sound levels in relation to humans, a weighted sound level is used to characterize the sound levels to which the human ear responds especially well by emphasizing mid-frequencies and de-emphasizing the low and high frequencies. Sound levels weighted in this manner are referred to as A-weighted decibels (dBA). The duration of a noise event, the number of times the noise occurs, and the average exposure to sound over an extended period of time are also important factors in describing or measuring noise.

One of the most common ways to describe ambient noise exposure over an extended period of time is as a day-night average sound level (Ldn) measured in decibels (dB). This is a cumulative measurement that accounts for the total sound energy occurring over a 24-hour period, with a 10 dB penalty added to those noises occurring between the hours of 10 p.m. and 7 a.m., when most people sleep and are most sensitive to noise. The Ldn that results from operating equipment is a function of the frequency, duration, and time of day during which the activity occurs. For example, a bulldozer operating continuously during the 15 "day" hours and for one "night" hour of the Ldn metric would create a predicted noise exposure of 64 dBA Ldn.

To account for varied measurements and reactions to sound, and based on scientific studies confirming its validity, the federal government has selected the Ldn as its common metric for noise exposure when describing and assessing aircraft noise. The Ldn is used by the U.S. Department of Housing and Urban Development (HUD), the Federal Aviation Administration (FAA), the U.S. Environmental Protection Agency (USEPA), and the Department of Defense (DoD).

Within the DoD, a program that assesses noise related specifically to airfield operations has been developed and adopted by its services, including the Air Force. Since the proposed action does not involve any changes to noise generated by aircraft, this assessment did not specifically include evaluation of aircraft noise.

Apart from noise associated with aircraft operations, federal and local governments have established noise guidelines and regulations for the purpose of protecting citizens from potential hearing damage and from various other adverse physiological, psychological, and social effects associated with noise.

3.6.1.2 Human Response to Noise. Human response to noise is very subjective, and there is wide diversity in response to noise. Responses vary not only according to the type of noise and the characteristics of the sound source, but also according to the sensitivity and expectations of the receptor, the time of day, and the distance between the noise source (e.g., an aircraft) and the receptor (e.g., a person or animal). For comparison purposes, Table 3-3 summarizes some typical noise sources with the corresponding noise measurement and a general human response to the sound level.

Table 3-3
Sound Levels of Typical Noise Sources in the Environment

dB	Human Response	Noise Sources				
120		Military jet aircraft takeoff from aircraft carrier with afterburner				
	Uncomfortably Loud	at 50 feet – 130 dB				
110	Cheomiorably Loud	Turbo-fan aircraft at takeoff power at 200 feet – 118 dB				
		Rock band				
100		Boeing 707 aircraft at 6,080 feet before landing – 106 dB				
		Jet flyover at 1,000 feet – 103 dB				
		Bell J-2A helicopter at 100 feet				
90		Boeing 737 aircraft at 6,080 feet before landing – 97 dB				
	Very Loud	Motorcycle at 25 feet				
		Food blender at 3 feet				
80		Propeller plane flyover at 1,000 feet – 88 dB				
		Diesel train 45 mph at 100 feet – 83 dB				
		Garbage disposal at 3 feet				
70		Passenger car 65 mph at 25 feet – 77 dB				
		Vacuum cleaner at 10 feet				
60	Moderately Loud	Air conditioning unit at 100 feet				
		Normal speech at 3 feet				
		Daytime commercial area				
50		Large transformer at 100 feet				
		Dishwasher in the next room				
40		Lowest limit of ambient sound				
	Quiet	Library background noise				
10	Quici	Just audible				
0		Threshold of hearing				
		6				

Source: FICON 1992 and FICAN 2008 dB = decibels; mph = miles per hour

3.6.2 Existing Noise Conditions

The primary source of loud noise at Maxwell AFB is from aircraft operations. This environment is fully described in the base's Air Installation Compatible Use Zones (AICUZ) report, released in 2009 (Maxwell AFB 2009a). Flying operations are typically conducted between the hours of 7 a.m. and 10 p.m. Predicted noise exposure contours between 65 and 80+ dBA Ldn remain almost entirely within the base boundary near the airfield (Figure 3-1). MAFB noise contours above 65 dBA do not extend into any residential areas or sensitive receptors on Maxwell AFB or in the surrounding community, and are mostly confined to the airfield environment.

Therefore, most areas of MAFB do not experience noise levels above 60-70 dBA on a regular basis. Figure 3-1 shows the current noise contours near the airfield at Maxwell. Noise from traffic, construction projects, and off-base industrial operations contribute intermittent noise to the environment at MAFB. Construction or demolition activities on the installation are normally limited to daytime hours, involve a limited area, and are short term.

There are no flying operations, and therefore, no noise impacts due to resident aircraft at Gunter Annex. Noise is currently generated by on-base and off-base traffic, occasional construction projects, and nearby industrial operations. Current noise exposure on Gunter would not be expected to exceed normal outdoor activity levels of 60-70 dBA on a regular basis.

Alabama River City of Montgomery Maxwell Air Force Base Maxwell AFB Interstate Noise Contours Day-Night Average Sound Levels Airfield Surface Area 65 dB **US Highway** 0.4 NM City of Montgomery State/County Road 70 dB 0.4 Mi 75 dB 0.2 80+

Figure 3-1, MAFB AICUZ Noise Contours

3.7 CULTURAL RESOURCES

3.7.1 Definition of Resource and Region of Influence

Cultural resources are prehistoric and historic sites, districts, structures, artifacts, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. Cultural resources can be divided into three major categories:

- archaeological resources,
- architectural resources, and
- traditional cultural properties.

There are no archaeological resources or traditional cultural properties within the area of proposed impact at Maxwell or Gunter. However, the proposed action would potentially impact several architectural resources at Maxwell.

3.7.1.1 Architectural Resources. Architectural resources include standing buildings or other structures of historic or aesthetic significance. Architectural resources generally must be more than 50 years old to be considered for protection under existing cultural resource laws. However, more recent structures, such as Cold War-era military buildings, may warrant protection if they have exceptional characteristics and the potential to be historically significant structures. Architectural resources must also possess integrity, which means that the structure's important historic features must be present and recognizable. The proposed action could potentially impact architectural resources at Maxwell, which are discussed below and in section 4.7.

3.7.1.2 Cultural Resource Regulations. Numerous laws and regulations require that possible effects on cultural resources be considered during the planning and execution of federal undertakings. These laws and regulations stipulate a process of compliance, define the responsibilities of the federal agency proposing the actions, and prescribe the relationships among involved agencies. In addition to NEPA, the primary laws that pertain to the treatment of cultural resources during environmental analysis are the National Historic Preservation Act (NHPA) (especially Sections 106 and 110), the Archaeological Resources Protection Act (ARPA), the American Indian Religious Freedom Act (AIRFA), and the Native American Graves Protection and Repatriation Act (NAGPRA). Under AIRFA, Maxwell AFB has no known traditional cultural or ceremonial sites to which the base must provide access.

Section 106 of NHPA requires that federal agencies give the Advisory Council on Historic Preservation (ACHP) a "reasonable opportunity to comment" on proposed actions. Federal agencies must consider whether their activities could affect historic properties that are already listed, determined eligible, or not yet evaluated under the National Register of Historic Places

(NRHP) criteria. Properties that are either listed on or eligible for listing on the NRHP are provided the same measure of protection under Section 106.

Section 110 of NHPA states that the Federal agency must assume responsibility for the preservation of historic properties that are owned or controlled by the agency and that the Federal agency should use, to the maximum extent possible, historic structures that are available. Section 110 reinforces the responsibilities of the Federal agency to inventory, evaluate, and preserve historic properties. It is the responsibility of the agency to establish a program to locate, inventory, and nominate to the Secretary all cultural resources that appear to qualify for inclusion in the National Register. Each agency is required to ensure that no potentially National Register eligible historic property is inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly. If Federal actions will substantially alter or destroy a National Register-eligible property, sufficient time and effort must be expended to properly record the property.

Section 111 of NHPA complements the directives of Section 110 by addressing the responsibilities of a Federal agency to implement appropriate adaptive uses, leases, exchanges, or management procedures for Federal historic properties. Agencies are encouraged to implement adaptive uses for historic properties that are not needed for current or projected agency purposes. After consultation with the ACHP/State Historic Preservation Office (SHPO), agencies may lease or exchange historic properties if the action is compatible with preservation.

Region of Influence. The region of influence for cultural resources is limited to the Maxwell and Gunter properties, and their immediately surrounding areas.

3.7.2 Existing Cultural Resource Conditions

3.7.2.1 Cultural Resource Assessments. Architectural inventories and assessments conducted at Maxwell AFB include a Cold War assessment (McMakin et al. 1997), a historic architectural survey of Maxwell and Gunter Annex by Brockington and Associates (which included a Cultural Resources Management Plan [Harvey and Poplin 1999], Historic Building Maintenance Plan [Harvey et al. 1999], and a Multiple Resource Area (MRA) Nomination [Poplin and Harvey 2001]), a Cold War evaluation (Salo and Prior 2002), and an Inventory and Assessment (GeoMarine 2012).

As a result of these surveys, which are maintained by the Cultural Resources Manager in 42 CES/CEV, several buildings proposed for transfer to other agencies and one building proposed for demolition have been identified as eligible for inclusion in the NRHP.

 Buildings 900, 902, and 904 at Gunter Annex have been recommended eligible for inclusion in the NRHP (Poplin and Harvey 2001). They are proposed for transfer to the City of Montgomery. • Facility 26, the Base Theater at Maxwell, is recommended eligible for listing in the NRHP (MAFB, 2012). It is proposed for demolition.

More detailed information on the eligibility of specific buildings listed for demolition can be found in Maxwell AFB "Inventory and Assessment" (MAFB, 2012), and the MAFB Integrated Cultural Resources Management Plan (MAFB, 2011b). Both of these documents are maintained in the Maxwell Environmental Office, 42 CES/CEV. Locations of historically eligible or listed facilities are depicted in Figures 1.2 and 1.3.

3.7.2.2 Potentially-Affected Properties. Buildings 900, 902, and 904 at Gunter Annex are proposed for transfer to the City of Montgomery. They were constructed around 1929 and are associated with a historic Montgomery municipal airport terminal, hotel and swimming complex. These buildings sit on land that is leased to MAFB by the City of Montgomery. The proposed action includes future termination of the lease and transfer of the facilities to the City of Montgomery.

Facility 26 at Maxwell is proposed for demolition. This facility is known as the Base Theater, which was constructed in 1949. It would require extensive work to rehabilitate and maintain, including a new heating and cooling system. It is not cost-effective for the Air Force to maintain this facility for its occasional use for large gatherings.

3.8 HAZARDOUS MATERIALS

3.8.1 Definition of Resource and Region of Influence

Hazardous material use and management at Maxwell AFB are regulated under the Toxic Substances Control Act, Occupational Safety and Health Administration (OSHA) regulations, the Emergency Planning and Community Right-to-Know Act, and Air Force Occupational Safety and Health Standards. The regulations require personnel using hazardous materials to be aware of the possible dangers, locate material safety data sheets (MSDSs) for all hazardous materials that they are using on-site, and wear the correct personal protective equipment required for materials that are being used. The Maxwell AFB Hazardous Materials Management Program maintains a list of all hazardous chemicals used on base, along with the proper MSDSs.

Region of Influence. Since proposed demolition activities would not involve use or disposal of large quantities of hazardous materials that could potentially migrate or affect areas outside the installation, the region of influence has been limited to Maxwell and Gunter properties and those areas in close proximity.

3.8.2 Existing Hazardous Materials Conditions

3.8.2.1 Hazardous Material Management. Current operations at Maxwell AFB require the use of hazardous materials. Hazardous materials are used in varying quantities by both military

personnel and on-base contractors. The Maxwell AFB Hazardous Waste Management Plan specifies the location of hazardous materials, procedures and equipment to prevent and clean up a release, and actions to be taken in the event of a release. This installation plan is maintained in the MAFB Environmental Office, 42 CES/CEV.

3.8.2.2 Asbestos. At Maxwell AFB and Gunter Annex, asbestos-containing material (ACM) is present in various amounts in older facilities. ACM is potentially present in pipe insulations, cement pipe, floor tiles, mastics, walls, and ducts. An Asbestos Management and Operation Plan is in effect at Maxwell AFB and is overseen by 42 CES/CEV (MAFB, 2013a). All proposed construction or demolition projects are reviewed by the 42 CES/CEV Asbestos Program Manager, who ensures that a survey and/or sampling is completed if necessary. Information and instructions are provided if asbestos-containing materials are present and if any removal of these materials will be required before demolition activities can begin. Qualified contractors are hired to perform abatement and disposal activities as necessary. The asbestos database and files are kept current by the Asbestos Program Manager, noting any changes in conditions and if ACM components are removed.

3.8.2.3 Lead-Based Paint. Maxwell AFB maintains data related to lead-based paint (LBP) testing conducted on-base and has a LBP Management Plan. Survey and screening information is kept on file in the 42 CES/CEV Environmental Office (MAFB 2013c). The management plan establishes responsibilities, record keeping, and waste disposal requirements, and provides information for removal and capture of LBP scrapings or dust. All proposed projects for renovations or demolitions are reviewed by the 42 CES/CEV LBP Program Manager. Information and instructions are provided if lead-based paint is present or assumed to be present and/or any removal of these materials will be required before demolition activities can begin. The database and files are kept current by the 42 CES/CEV Lead-Based Paint Program Manager with any changes in conditions and if materials are removed or left in place.

Typically for non-housing facilities, LBP is located on exterior components such as soffits, windowsills, doors, exterior trim work, and front and back porches. Interior components with LBP may include molding, baseboards, stair rails and some walls if these are the original components of the facility. A number of facilities have been renovated inside, so lead-based paint may be very minimal.

Historic painting activities may not have included capture and proper disposal of paint scrapings or dust; therefore, it is possible that soils present around facilities that have LBP may exhibit elevated concentrations of lead.

3.8.2.4 Pesticides. Prior to the development of MAFB for military use, the land in the vicinity of the installation was cultivated for agricultural purposes. Historic crops in the area have included cotton, peanuts, and pecans. Arsenic was a common constituent in pesticides used for

crop dusting fields of cotton. It is possible that pesticides may have been applied in certain areas of the installation prior to development for military use.

Historic pesticide applications have occurred throughout Maxwell AFB. Historical pesticides included diazinon, allethrin, chlordane, and pyrethrin-based products. It is known that chlordane had been used on Maxwell AFB and Gunter Annex as a pesticide prior to its EPA ban in 1989. Due to the persistence of chlordane in the environment, it is likely that concentrations of chlordane may be present in soils around the foundations of the buildings to be demolished. For any buildings constructed before 1990 which are proposed for demolition, 42 CES/CEV requires that soils around the building foundations be tested for the presence of pesticides (chlordane). The EPA has specific handling and disposal requirements for soils and/or any waste streams that have been contaminated with chlordane that exceed threshold limits. A TCLP (waste stream analysis) sample may also be required, depending on the perimeter soil sample results and the type of demolition or renovation activities being performed.

Currently, the MAFB Integrated Pest Management Plan guides pest control efforts on the installation. The MAFB Entomology office is responsible for the control of general household pests such as roaches, ants, flies, silverfish, wasps, and mice. Common pesticides and herbicides such as Roundup®, ant and roach bait, Amdro®, wasp and hornet spray, and mousetraps are used as part of MAFB Integrated Pest Management.

3.9 SOLID WASTE AND HAZARDOUS WASTE

3.9.1 Definition of Resource and Region of Influence

3.9.1.1 Solid Waste. Municipal solid waste management and compliance at Air Force installations are established in AFI 32-7042, Solid and Hazardous Waste Compliance. AFI 32-7042 incorporates by reference the requirements of RCRA Subtitle D, 40 CFR 240 through 244, 257, and 258, and all other applicable federal regulations, AFIs, and DoD directives. In general, AFI 32-7042 establishes the requirement for installations to have a solid waste management program that incorporates the following:

- a solid waste management plan;
- procedures for handling, storage, collection, and disposal of solid waste;
- record keeping and reporting; and
- recycling of solid waste, as addressed in AFI 32-7080, Pollution Prevention Program.

3.9.1.2 Hazardous Waste. Hazardous wastes are defined by the Solid Waste Disposal Act (SWDA) as amended by the Resource Conservation and Recovery Act (RCRA), which was further amended by the Hazardous and Solid Waste Amendments, RCRA subtitle C (40 CFR, Parts 260 through 270). USEPA regulatory authority is subsequently delegated to the State of

Alabama. Hazardous waste management at Maxwell AFB is also regulated under AFI 32-7043, Hazardous Waste Management and Minimization.

These regulations are implemented at Maxwell AFB through hazardous waste permitting procedures and the Maxwell AFB Hazardous Waste Management Plan. The plan details hazardous waste packaging, turn-in, transportation, storage, record keeping, and emergency procedures.

Region of Influence. The ROI includes the Maxwell and Gunter properties. Consideration was also given to the impact on local and regional landfills that are utilized for waste disposal.

3.9.2 Existing Solid Waste and Hazardous Waste Conditions

3.9.2.1 Solid Waste. All municipal solid waste generated at Maxwell AFB is managed by Air Force contractors and subsequently disposed of at the North Montgomery landfill. Additionally, recycling is encouraged at Maxwell AFB and recyclable materials are collected and transported to an off-base recycling center by a private contractor. Maxwell AFB disposed of 2,714 tons and recycled 2,394 tons of non-construction and demolition solid waste in FY2011 (C. Kennington, 2013).

Approximately 115,000 tons of solid waste are disposed of per year in the sanitary waste area of the North Montgomery landfill (Hatcher, 2013). The landfill can also accept construction and demolition (C&D) wastes, which are disposed of in the C&D area of the landfill. Approximately 60,000 tons of C&D wastes are disposed per year in this landfill. Maxwell AFB disposed of 616 tons and recycled 569 tons of construction and demolition solid waste in FY2011 (C. Kennington, 2013. The sanitary area of the landfill has a remaining life span of 30 years with no room for expansion. The C&D landfill has approximately 30 years of remaining life span with the utilization of an additional 40 acres adjacent to the existing site.

3.9.2.2 Hazardous Waste. Hazardous waste is generated at Maxwell AFB from aircraft maintenance, spent hazardous materials, facility maintenance, firing range operations, and remediation. Approximately 15,000 pounds (lbs) of RCRA hazardous waste was generated at MAFB and disposed of by the DLA Disposition Services [formerly known as Defense Reutilization and Marketing Office (DRMO)] during 2011 (J. Kennington, 2013). Maxwell AFB does not currently maintain any active permitted hazardous waste storage facilities. Air Force waste management operations at Maxwell AFB are registered with the USEPA under identification number AL0570024182.

Day-to-day operations generate multiple types of hazardous wastes that require special handling and proper disposal. These include oils and fuels, cleaning compounds, paints and solvents, and batteries. Hazardous wastes are collected at 21 initial accumulation points. These wastes are then transferred to two accumulation sites, Building 1057 at Maxwell and building 910 at Gunter Annex. At the Maxwell accumulation facility, the waste must be removed by a certified contractor within 90 days for off-base treatment/disposal at an appropriate facility. At the

Gunter Annex, the waste must be removed within 180 days. The DLA Disposition Services, located at the Anniston, Alabama Army Depot, manages the removal and disposal of these wastes.

3.10 ENVIRONMENTAL RESTORATION PROGRAM SITES

3.10.1 Definition of Resource and Region of Influence

The Environmental Restoration Program (ERP), formerly known as the Installation Restoration Program (IRP), was implemented by the DoD to identify and evaluate areas and constituents of concern where toxic or hazardous materials may have been disposed of or spilled. Once the areas and constituents had been identified, the ERP was tasked to remove the hazards in an environmentally-responsible manner. All response actions are based upon provisions of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and the Superfund Amendments and Reauthorization Act (SARA) of 1986 as clarified in 1991 by Executive Order 12580, Superfund Implementation.

Region of Influence. The ROI for the ERP sites encompasses both the Maxwell and Gunter installation properties, as well as some off-base areas adjacent to the installation properties. Contaminated groundwater extends underneath off-base property to the south (upgradient) of Maxwell property, and east of the Gunter property.

3.10.2 Existing ERP Conditions

The Maxwell/Gunter Environmental Restoration Program consists of 32 ERP sites and 3 Military Munitions Response Program (MMRP) areas at Maxwell and 12 ERP sites at Gunter. The presence of chlorinated solvents and fuel-related contaminants in the shallow groundwater aquifer is a primary concern at both the Maxwell and Gunter properties, although this shallow aquifer is not a source of drinking water for either property. In the vicinity of Maxwell, there has been some contaminant migration into the deeper Eutaw aquifer. Although the Eutaw is a source of drinking water, the direction of groundwater flow beneath contaminated areas of Maxwell AFB is not toward Montgomery's West Well Field, which lies approximately half a mile south of the Base.

3.10.2.1 Maxwell AFB ERP Sites. Currently, at Maxwell AFB:

- Fourteen sites, FT-002, LF-002, LF-003, LF-004, LF-005, LF-006, SS-002, SS-003, SS-004, SS-006, SS-007, SS-008, SS-009, and SS-011, comprise Operable Unit 1.
- OU-1 has reached remedy-in-place, since the remedies selected in the October 2002 ROD are being implemented. OU-1 is in the remedial action-operation phase.
- One site, SD-001, received oral regulatory concurrence in May 2011 for no further action following confirmatory sampling.

- One site, SS-010, is in the corrective action phase of the Alabama Risk-Based Corrective Action process.
- Six sites, DP-001, SS-001, SS-005, ST-002, LF-001, and FT-001 are closed out under the ERP.
- Ten sites, ST-001, ST-003, ST-004, ST-005, ST-006, ST-007, ST-008, and ST-009, ST-010, and ST-011 were closed out under the Alabama UST Program.

Additional source characterization activities are in progress for OU-1 and SS-010, with the objective of gaining additional site data to facilitate remedial process optimization.

A remedial investigation was conducted in 2012 for three military munitions response areas, SR300, TS301, and SR302. Lead and PAH contamination above health-based screening levels was identified in MMRP area soils during the comprehensive site evaluation (URS, 2011). Contaminant concentrations and the extent of distribution were verified during a remedial investigation in 2012. Three locations within MRA TS301 were targeted for removal actions, which consisted of removing and replacing top layers of soil with elevated concentrations of lead and PAH in soils. Additional actions will be evaluated in an upcoming MMRP Feasibility Study.

Table 3-4 summarizes information on the ERP sites and one MMRP site that are near facilities proposed for demolition at Maxwell, while Figure 3-2 shows the locations of all the ERP sites at Maxwell (MAFB, 2011a).

3.10.2.2 Gunter Annex ERP Sites. Of the 12 IRP sites at Gunter Annex:

- Six sites, ST-001, ST-002, ST-003, ST-004, SS-002 and SS-003 have been closed out under the Alabama UST Program.
- Five sites, LF-001, SS-001, SS-004, SS-005, and SS-006, have received concurrence from ADEM for No Further Action with institutional control under the ERP. The installation-wide ban on potable and irrigation well drilling at Gunter is considered an institutional control by the state, even though the drilling ban exists basewide on both installations and was in place before these ERP sites reached NFA.
- One site, SD-001, includes four geographically separate subset areas. Remedial actions for Areas 2 and 3 [SD-001(2) and SD-001(3)] were accepted by ADEM (Bechtel-S Corp., 2007b). An *in situ* treatment action and post-treatment confirmatory sampling were completed in FY11 at SD-001(1). Results of the confirmatory sampling are expected later in FY11. Area 4 [SD-001(4)] consists of chlordane contamination identified during soil

testing after housing unit demolition in 2010. Further delineation of contaminant concentrations at SD-001(4) took place in 2012, and soil treatment is currently underway.

Additional information concerning the ERP programs or sites may be obtained through the MAFB ERP Program Office, 42 CES/CEAN.

Table 3-5 summarizes the sites at Gunter that are near facilities proposed for demolition, while Figure 3-3 shows the location of all the ERP sites at Gunter (MAFB, 2011a).

Table 3-4 - Maxwell ERP Sites Near Facilities Proposed for Demolition or Transfer

Site ID	Description	Material Disposed	Date of Operation	Completed or Ongoing ERP Activities	2013 Status	Regulatory Mechanism	RRE Score/ Date of Scoring	Operable Unit
DP-001	Electroplating Waste Disposal Area	Drums of electroplating waste suspected	1940s-Early 1970s	Electromagnetic and geophysical surveys were conducted in 1986 and 1990, respectively. No buried drums were identified. Confirmatory sampling conducted in 1999 per ADEM request. CLOSURE REFERENCE: AR # 462. No Restrictions.	Closed: 2/20/2001	CERCLA/ NCP	Low/ NFRAP site	N/A
SS-003	Building 913 Contaminated Groundwater	Petroleum hydrocarbons and chlorinated solvents	Late 1930s- Late 1980s	A PA/SI was conducted in 1989. Five USTs and associated contaminated soil were removed in 1991/1992. Soil and groundwater sampling and analysis were conducted in 1992, 1994, and 1997. Included in OU-1 RI/FS, 2002 ROD & LTM remedy. Restriction: Groundwater Disturbance Prohibited.	In RA-O	CERCLA/ NCP	High/January 1995	OU No. 1
SS-004	Contaminated Groundwater (External Source)	Chlorinated hydrocarbons	Late 1930s- Present	Groundwater was sampled and analyzed in 1991, 1997, 1999. Included in OU-1 RI/FS, 2002 ROD. Hydrogen releasing compound injected in 2002; groundwater monitoring. Additional investigation to delineate hot spots in Kelly St. gate area began in 2008. Hot-spot treatment started in 2012 near POL yard. Restriction: Groundwater Disturbance Prohibited.	In RA-O	CERCLA/ NCP	High/ January 1995	OU No. 1
SS-007	Building 1037 Contaminated Groundwater	Chlorinated hydrocarbons	1930s-early 1980s	In 1987, an UST at B. 1037 was removed. RI/FS activities were conducted at this site in 1988, 1989, 1991, 1996, 1998. Included in OU-1 RI/FS, 2002 ROD & LTM remedy. Restriction: Groundwater Disturbance Prohibited.	In RA-O	CERCLA/ NCP	High/ January 1995	OU No. 1
ST-001	Building 1037 USTs	Spills/releases of AVGAS and JP-4	Early 1940s- Late 1960s	RI/FS activities were conducted at this site in 1988, 1989, and 1991. In 1991, this UST site was closed out. No Restrictions.	Closed:	Alabama UST Program	Low/ NFRAP Site	N/A
ST-003	Building 913 USTs	MOGAS	1940s- Unknown	A PA/SI was conducted In 1989. Five USTs and associated contaminated soil were removed in 1991/1992. Soil and groundwater sampling and analysis were conducted in 1992 and 1994. Free product removal was completed. NFRAP was issued in 2007, with one well transferred to the OU-1 LTM program. CLOSURE REFERENCE: AR 736-2. No Restrictions.	Closed: 5/14/2007	Alabama UST Program	Low/ NFRAP Site	N/A

Table 3-4, continued

Site ID	Description	Material Disposed	Date of Operation	Completed or Ongoing ERP Activities	2013 Status	Regulatory Mechanism	RRE Score/ Date of Scoring	Operable Unit
ST-006	Building 714 UST	Diesel fuel	1960s-1965	In 1991, the UST and associated contaminated soil were removed. NFRAP issued, site closed. CLOSURE REFERENCE: AR 2000, pg. 5. No Restrictions.	Closed: 3/4/1992	Alabama UST Program	Low/ NFRAP Site	N/A
ST-009	Building 668 USTs	POLs	1937-1954	In 1991, seven USTs were sampled, analyzed, and removed. In 1992, an eighth UST was discovered and removed. NFRAP was issued and site closed. CLOSURE REFERENCE: AR 2000, pg. 6. No Restrictions.	Closed: 7/2/1992	Alabama UST Program	Low/ NFRAP Site	N/A
TS301	Old Skeet Range	Expended munitions from small arms, MEC	1945-1976	Historical records review was completed in 2007. CSE completed in 2010. RI completed in 2012. FS planned for 2013. An Interim Removal Action was completed in 2012.	FS Planned	CERCLA/ NCP	a	N/A

^a Cleanup priority cannot be assigned until the MMRP FS is completed.

ADEM = Alabama Department of Environmental Management NCP National Oil and Hazardous Substances Pollution Contingency Plan AFB = Air Force Base NFA No Further Action AFFF = Aqueous film forming foam NFRAP = No Further Response Action Planned = Administrative Record AR No. Number ARBCA = Alabama Risk Based Corrective Action OU Operable unit AVGAS = Aviation gasoline PA/SI Preliminary Assessment/Site Inspection Petroleum, oils, and lubricants CE = Civil Engineering POL CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act RA-O Remedial action - operation Environmental Restoration Program (includes the IRP and the MMRP) PRB Permeable reactive barrier FS = Feasibility study RBCA Risk based corrective action ID = Identification RI/FS Remedial investigation/feasibility study JP-4 = Jet engine fuel ROD Record of Decision LTM RRE Relative Risk Evaluation = Long-term monitoring MEC = Munitions and explosives of concern U.S. = United States MOGAS = Motor gasoline UST = Underground Storage Tank N/A = Not applicable

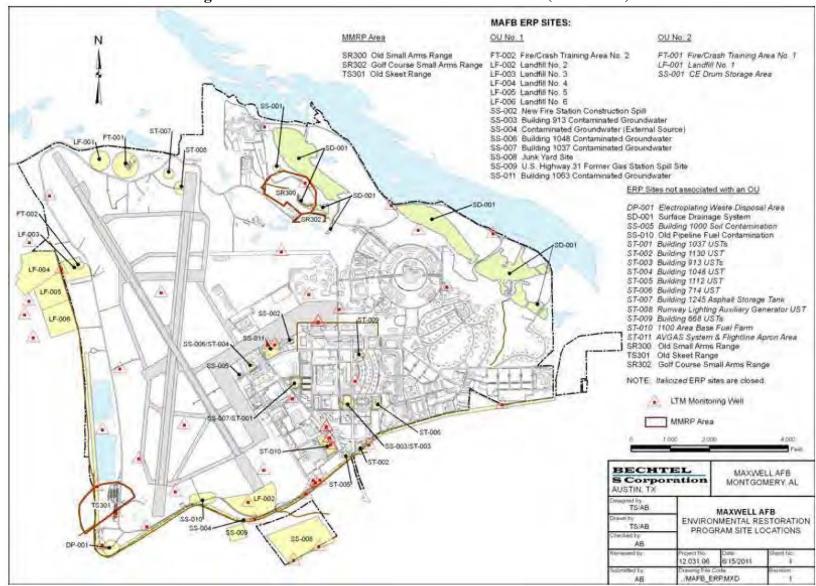


Figure 3-2 - Location of ERP Sites on Maxwell AFB (Main Base)

Table 3-5 – Gunter ERP Sites Near Facilities Proposed for Demolition or Transfer

Site ID	Description	Material Disposed	Date of Operation	Completed or Ongoing ERP Activities	2013 Status	Regulatory Mechanism	RRE Score/ Date of Scoring	Operable Unit
SS-001	Playground Spill Site	Aircraft fuels	1943-1946	In the early 1970s, 6 USTs were removed. In 1991 and 1992, preliminary investigations consisted of soil and groundwater sampling. RI conducted in 1998; NFA recommended. Six quarters confirmatory groundwater monitoring completed. NFA ROD approved by ADEM in 2007. CLOSURE REFERENCE: AR 765. Restriction: Groundwater Disturbance Prohibited.		CERCLA/ NCP	Medium/ January 1995	N/A
SS-002	New CE Complex Spill Site (Bldg 830)	Diesel fuel or weathered JP-4.	1991*	In 1992, soils contaminated with fuels were removed. Site was closed in 1994. CLOSURE REFERENCE: AR 2000, pg. 13. No Restrictions.	Closed: 9/1/1994	Alabama UST Program	Low/ NFRAP Site	N/A
SS-005	Bldgs 847 and 848, Print Plant	Chlorinated Solvents and gasoline/ motor fuels	1948-present	In 1994, a supplemental PA/SI was performed, including soil and groundwater sampling and analysis. RI conducted in 1998; NFA was recommended. Six quarters of confirmatory groundwater monitoring were completed. NFA was approved by ADEM in 2007. Restriction: Groundwater Disturbance Prohibited.	Closed 11/15/2007	CERCLA /NCP	Medium/ January 1995	N/A
ST-004	AVGAS Distribution System	AVGAS/aircraft fuels	1943-Late 1940s	In 1992, a preliminary search for the AVGAS System was conducted. During the 1994 supplemental PA/SI, ground penetrating radar and magnetometer surveys were conducted, then soil and groundwater were sampled and analyzed. ADEM agreed with NFA recommendation in 1997. Site closed 1998. CLOSURE REFERENCE: AR 2000, pg. 61. No Restrictions.	0. =	Alabama UST Program	Medium/ January 1995	N/A
SD-001	Gunter Basewide Surface Runoff; – 4 Geographically Separate Areas	Industrial wastes, POLs, paint stripper, and pesticides.	1940-1990	Sediment removal actions for surface areas 2 and 3 were accepted by ADEM. At area 1, in-situ treatment and confirmatory sampling were conducted in 2011. Area 4 contains pesticide residue in soil near former housing units. Soil treatment to begin in 2013.		CERCLA /NCP	Medium/ January 1995	SD-001

ADEM = Alabama Department of Environmental Management

AR = Administrative Record AVGAS = Aviation gasoline CE = Civil Engineering

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act

EPA = U.S. Environmental Protection Agency ERP = Environmental Restoration Program

I.D. = Identification Evaluation IRA = Interim Removal Action

JP-4 = Jet engine fuel

UST = Underground Storage Tank

N/A = Not applicable

NCP = National Oil and Hazardous Substances Pollution

Contingency Plan

NFA = No Further Action

NFRAP = No further response action planned PA/SI = Preliminary Assessment/Site Inspection POLs = Petroleum, oils, and lubricants

RI/FS = Remedial Investigation/Feasibility Study

ROD = Record of Decision
RRE = Relative Risk Evaluation
* Date of discovery

GUNTER PARK DR **GUNTER ANNEX ERP SITES** SD-001(1) AVENUE A LF-001 Landfill Near EPA Building DUNCAS CIR SD-001 Basewide Surface Runoff SS-001 Playground Spill Site RENERGE ST SS-002 New CE Complex Spill Site (Bldg., 830) SS-002 New CE Complex Spill Sife (bidg., 830)
SS-003 Bldg. 857 Waste Oil Tank Leakage
SS-004 Base Housing/Industrial Area Contaminated Groundwater
SS-005 Bldgs., 847 and 848, Print Plant
SS-004 SS-006 Bldg. 503, Old Entomology Shop. Contaminated Groundwater
ST-001 Bldg. 408 USTS
ST-002 Bldg. 701 USTS
ST-003 Bldg. 813 UST SS-006 ST-002 ST-003 SD-001(3) ST-002 Bidg. 813 UST ST-004 AVGAS Distribution System NOTE: Italicized ERP sites are closed. LTM Monitoring Well SD-001(4) SD-001 SS-003 MIDPARK RD SS-001 ST-004 BECHTEL MAXWELL AFB -SD-001 SD-001(2) GUNTER ANNEX MONTGOMERY, AL S Corporation AUSTIN, TX TS/AB **GUNTER ANNEX** Drawn by: TS/AB **ENVIRONMENTAL RESTORATION** PROGRAM SITE LOCATIONS ROYAL CREST DR 12.031.06 6/9/2011 STRATON CT QAK AVE /GUANX_ERP.MXD

Figure 3-3 - Location of ERP Sites on Gunter Annex

3.11 INFRASTRUCTURE AND UTILITIES

3.11.1 Definition of Resource and Region of Influence

Utilities considered include potable water, sanitary sewer, electricity, and natural gas. Part of the objective of the 20/20 initiative and the proposed action is to lower the consumption of utilities and the cost of operating and maintaining Air Force facilities.

Region of Influence. The ROI is Maxwell and Gunter properties and the utility systems that service the properties.

3.11.2 Existing Infrastructure and Utility Conditions

- **3.11.2.1 Potable Water.** Drinking water for Maxwell AFB is provided by the Montgomery Water Works and Sanitary Sewer Board, and is derived from water supply wells and surface water. Maxwell AFB uses only a minor percentage of the existing utility capacity. During fiscal year 2012, Maxwell and Gunter used 392,343 kgal of water (Riley, 2013). Overall potable water consumption in the community would not change because the number of personnel (and dependents) assigned to Maxwell AFB would remain the same.
- **3.11.2.2 Sanitary Sewer.** Sanitary sewage from Maxwell AFB currently discharges to a city pumping station (Building 1313 on the Main Base on a Montgomery Water Works and Sanitary Sewer Board easement), and then is pumped north to Montgomery's Towassa Wastewater Treatment Plant. Sanitary sewage from Gunter Annex is pumped to the Econchate Wastewater Treatment Plant southwest of the Gunter Annex. Maxwell AFB uses only a minor percentage of the existing utility capacity. Overall domestic wastewater generation in the community would not change because the number of personnel (and dependents) assigned to Maxwell AFB would remain the same.
- **3.11.2.3 Electricity.** Electricity is provided to Maxwell AFB by Alabama Power Company. Electrical consumption on Maxwell (including Gunter Annex) for fiscal year 2012 was 170,558,331 kilowatt hours (kwh) (Riley, 2013).
- **3.11.2.4 Natural Gas.** Natural gas is supplied by the Alabama Gas Company. Consumption of natural gas at Maxwell (including Gunter Annex) during fiscal year 2012 was 320,565 mcf (thousand cubic feet) (Riley, 2013). Maxwell AFB uses only a minor percentage of the existing utility capacity.

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4 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This chapter describes the potential environmental impacts that are likely to occur as a result of implementation of the proposed or alternative actions. The No Action Alternative provides a baseline against which the impacts of the proposed actions can be compared. A discussion of mitigation measures is included where necessary. Any resultant irreversible or irretrievable commitments are noted. Criteria and assumptions used to evaluate potential impacts are discussed at the beginning of each section.

4.2 EFFECTS ON CURRENT MISSION

The activities associated with implementation of the proposed or alternative actions would not change the current mission of the installation or the current personnel levels. The proposed disposal of aging and inefficient facilities would continue to support the current and future mission of the installation and the Air Force goals.

HOW WOULD THE PROPOSED ACTION OR ALTERNATIVES AFFECT THE ENVIRONMENT?

4.3 AIR QUALITY

4.3.1 Significance Criteria and Methodology

The following factors were considered in evaluating air quality: (1) the short- and long-term air emissions generated from demolition activities; (2) the type of emissions generated; and (3) the potential for emissions to result in ambient air concentrations that exceed any of the NAAQS or State Implementation Plan (SIP) requirements.

Air quality impacts could be considered significant if the proposed action or alternative:

- caused an increase in pollutants that exceeded the NAAQS;
- contributed to an existing violation of the NAAQS;
- prevented or delayed attainment of NAAQS or SIP criteria; or
- impaired visibility within federally mandated Prevention of Significant Deterioration (PSD) Class I areas.

According to the USEPA's General Conformity Rule in 40 CFR Part 51, Subpart W, any proposed federal action that has the potential to cause violations in a NAAQS nonattainment

or maintenance area must undergo a conformity analysis. Since Maxwell and Gunter are located in an area that is in attainment, a conformity analysis is not required.

4.3.2 Proposed Action

The proposed action would result in short-term emissions during demolition of structures and associated infrastructure, principally from dust generated on site and the use of construction equipment and related vehicles. There would be no increase in long-term emissions. On the contrary, a long-term decrease in emissions would be expected, since the facilities' boilers and generators would be permanently removed as a result of demolition.

The combustion of fuel by the construction equipment and related vehicles involved in the Proposed Action would cause intermittent, temporary increases in CO, VOC, NOx, SO₂, and PM₁₀ and PM_{2.5}. Fugitive dust would be created by the building debris and by construction equipment as it disturbs soils.

The quantity of uncontrolled fugitive dust emissions from a construction site is proportional to the area of land being worked on and the level of construction activity. The USEPA has estimated that uncontrolled fugitive dust emissions from ground-disturbing activities would be emitted at a rate of 80 lb of total suspended particulate (TSP) per acre per day of disturbance (USEPA 1995). In a USEPA study of air sampling data at a distance of 50 meters downwind from construction activities, PM₁₀ emissions from various open dust sources were determined based on the ratio of PM₁₀ to TSP sampling data. The average PM₁₀ to TSP ratios for topsoil removal, aggregate hauling, and cut and fill operations are reported as 0.27, 0.23, and 0.22, respectively (USEPA 1988). Using 0.24 as the average ratio for purposes of analysis, the emission factor for PM₁₀ dust emissions becomes 19.2 lb per acre per day of disturbance.

Because $PM_{2.5}$ emissions factors have not been developed for all operations, it is conservatively assumed that $PM_{2.5}$ emissions are equivalent to PM_{10} emissions. The emissions presented in Table 4-1 include the estimated annual PM_{10} and $PM_{2.5}$ emissions associated with the uncontrolled fugitive dust emissions from the renovation, construction, and demolition sites. Emissions from infrastructure improvements are also included. These emissions would produce slightly elevated short-term PM_{10} ambient air concentrations.

The USEPA estimates that the effects of fugitive dust from construction activities would be reduced significantly with an effective watering program. Watering the disturbed area of the construction site twice per day with approximately 3,500 gallons per acre per day would reduce TSP emissions as much as 50 percent (USEPA 1995). The effects from fugitive dust would last only as long as the duration of construction activity, fall off rapidly with distance from the construction site, and would not result in long-term impacts.

Specific information describing the types of construction equipment required for a task, the hours the equipment is operated, and the operating conditions vary widely from project to project. For purposes of analysis, these parameters were estimated using established cost estimating methodologies for construction and experience with similar types of construction projects (Means 1996). Combustive emissions from construction equipment exhaust were estimated by using USEPA-approved emissions factors for heavy-duty, diesel-powered construction equipment (USEPA 2000) along with the emission factors for the estimated types and numbers of equipment expected to be used during construction. These emissions are included in Table 4-1. As with fugitive dust emissions, construction emissions would produce slightly elevated air pollutant concentrations. However, the effects from construction activities would last only as long as the duration of construction activity, fall off rapidly with distance from the construction site, and would not result in long-term impacts.

Based on recent past demolitions, it is estimated that demolition activity for each facility would last approximately 30 days. The unit-square footage for demolition was estimated using the number of units and square footage presented in Table 2-2.

Review of emissions from the proposed action in Table 4-1 indicates that the greatest percentage of impact to the local emissions in a given year during the project would be PM_{2.5} or PM_{10 at} 0.11 percent from the combined demolition operations. The emissions would be temporary and would be eliminated after the activity is completed. All emissions fall well below the 10 percent level that would be considered regionally significant by the USEPA if the region was in nonattainment for any of the criteria pollutants as stated in 40 CFR 51, Subpart W, Section 852. A regionally significant action determination is not required for the Montgomery area because it is an attainment area. It has been included in Table 4-1 to show that the emissions from the proposed action would be regionally insignificant even if the Montgomery area was a nonattainment or maintenance area.

The short-term emissions from the proposed action would not cause ambient concentrations to exceed the NAAQS or limits that would be set in a specific SIP. The emission of minor amounts of air pollution would be unavoidable; however, the individual and cumulative impacts during demolition would have little impact when compared to the 2009 Montgomery air emissions.

Table 4-1 - Expected Emissions Average per Construction Year

Criteria Air Pollutant	СО	VOC	NOx	SOx	PM ₁₀	PM _{2.5}
Proposed Action (tpy)	8.6	2.5	5.91	2.1	9.22	9.22
Percent of Regional Emissions	0.82	0.22	1.07	0.32	5.03	8.84
No Action Alternative (tpy)	0.00	0.00	0.00	0.00	0.00	0.00
Percent of Regional Emissions	0	0	0	0	0	0
2009 Montgomery Actual Emissions (tpy)	1049.26	1156.34	551.13	644.22	182.98	104.22

CO=carbon monoxide

NO_x=nitrogen oxides

PM_{2.5}=particulate matter equal or less than 2.5 micrometers in diameter

PM₁₀=particulate matter equal or less than 10 micrometers in diameter

SOx=sulfur oxides

tpy - tons per year

VOC=volatile organic compound

Montgomery Actual Emissions Source: ADEM (TATE 2009).

4.3.3 No Action Alternative

Under the No Action Alternative, buildings would be vacated and shut down as consolidation moves occurred. Air emissions would be reduced as the emission sources associated with the facilities (such as boilers and generators) would be inactivated or operated at only minimal levels. However, overall installation and regional emissions would not change significantly, and there would be no change in local or regional air emission status. Therefore, there would be minimal change in the current Maxwell AFB emissions described in Section 3.3.2.

4.3.4 Mitigative Actions

Little impact to local air quality would be expected from the proposed action or no action alternative associated with the demolition located at Maxwell AFB. Best management practices would include watering the disturbed area of the construction site twice per day with approximately 3,500 gallons per acre per day, which would reduce Total Suspended Particles emissions as much as 50 percent. No other mitigative actions would be required.

4.4 WATER RESOURCES

4.4.1 Significance Criteria and Methodology

Impacts to surface water and groundwater resulting from the proposed or alternative actions might be considered significant if project activities resulted in:

- changes to water quality or supply,
- threatened or damaged unique hydrological characteristics,
- surface water quality declining such that the existing surface water or drinking water quality standards would be violated, or
- an increase in water usage from the underlying aquifer so that the usage had an impact on the aquifer.

Analysis focused on the potential for increased sediment loads during demolition activities and consideration for the increase or decrease in groundwater filtration due to the proposed actions.

4.4.2 Surface Water and Drainage

4.4.2.1 Proposed Action

The proposed action consists of multiple building demolitions on both Maxwell and Gunter Annex, which includes the removal of all vertical structures, concrete slabs and foundations. Demolition activities may also involve the removal of concrete sidewalks and pavement areas, depending on the scope of work. Impervious surface areas would be decreased, therefore increasing the infiltration capacity. This would produce a positive impact to both surface water and ground water resources. The proposed action has the potential to cause increased sediment loading of surface water during the demolition activities. This potential is short-term and is manageable through the implementation of a Storm Water Pollution Prevention Plan (SWPPP) along with the incorporation of best management practices for sediment control during demolition. Implementation of these actions would minimize potential water quality problems. All sites would be permanently stabilized with grass sod or seed upon completion of demolition.

This SWPPP would include the following management actions:

- Sediment must be retained on-site to the greatest extent practicable using structural best management practices (e.g., silt fencing, erosion control fabric, wattles)
- Vegetated buffer zones should be maintained along all perennial to ephemeral drainages
- Structural best management practices must be used to divert uphill storm water away from construction areas

Velocity dissipation devices should be used at all discharge locations

Depending on final designs and demolition schedules, the proposed action may involve the disturbance of more than one acre. A Notice of Intent under the general Alabama storm water discharge permit will be filed with ADEM, by the contractor, if the individual projects disturb greater than one acre.

The long-term impact from the proposed demolition actions on MAFB would be expected to be beneficial, as a result of increased infiltration due to a decrease in paved/built area.

4.4.2.2 No Action Alternative

Under the No Action Alternative, there would be no change in the baseline conditions described in Section 3.4.2.

4.4.2.3 Mitigative Actions

In order to minimize the potential for increased sediment loading of downstream surface water bodies, a SWPPP including best management practices should be implemented as discussed above. Best management practices would include measures such as using silt fences or wattles. These measures would be temporary, utilized only during periods of demolition. No other mitigative actions would be required due to absence of long-term adverse impacts to surface water quality or quantity.

4.4.3 Groundwater

4.4.3.1 Proposed Action

Implementation of the Proposed Action would not impact the quality or quantity of groundwater at Maxwell AFB, the Gunter Annex or the surrounding area. Groundwater beneath the subject property is anticipated to be approximately 45 to 55 ft below ground surface (bgs). Shallow groundwater is not a source of drinking water, and groundwater is not likely to be encountered by facility occupants or by demolition workers. If groundwater were encountered, care would be taken during demolition activities to ensure that groundwater resources are protected from contamination. Proper care would also be taken during demolition activities to ensure that workers are protected from potentially contaminated groundwater (see sections 3.4.2 and 3.10.2).

4.4.3.2 No Action Alternative

Under the No Action Alternative, there would be no change in the general conditions described in Section 3.

4.4.3.3 Mitigative Actions

There are no adverse impacts to groundwater resources anticipated to result from the proposed action or alternatives; therefore, no mitigative actions are required.

4.5 SOILS

4.5.1 Significance Criteria and Methodology

The protection of unique geologic features, minimization of soil erosion, and the location of facilities relative to potential geologic hazards are considered when evaluating impacts of a proposed action. Generally, impacts on geological resources are not significant if proper construction techniques and erosion control measures are used to minimize or mitigate short-and long-term disturbance to soils. Activities that would affect soil composition, causing stressed or failed vegetation or undermining of structures might be considered a significant adverse impact on soils.

Soils across the installation properties tend to be highly erodible. The most likely impact would be loss of topsoil from the work sites due to erosion. Siltation into nearby waterways was also considered, but is addressed with potential surface water impacts in section 4.4.2.

4.5.2 Proposed Action

During demolitions, the upper six to 18 inches of soils would be disturbed during clearing and grading activities. However, implementation of construction best management practices (BMPs) during demolition would reduce impacts to soils. In addition, standard erosion control measures (e.g., silt fencing, sediment traps, application of water sprays, and prompt revegetation of disturbed soils) would be implemented to retain soil on site and reduce potential impacts of construction (see section 4.4.2). Therefore, no long-term negative impacts to soils would be expected as a result of implementation of the proposed action.

4.5.3 No Action Alternative

There would be no change from baseline conditions described in section 3.5.1.

4.5.4 Mitigative Actions

Procedures are in place within 42 CES/CE to ensure that projects implement and maintain BMPs throughout the demolition phases. These stormwater pollution prevention measures (described in section 4.4.2.1) would help minimize soil erosion. No other mitigative actions would be necessary.

4.6 NOISE

4.6.1 Significance Criteria and Methodology

Noise may be significant due to several factors. These factors would range from mild annoyance to more significant interference with daily activities such as conversation and sleep. At louder levels, noise may become significant if it has the potential to cause permanent hearing damage. In the following sections, discussion will focus on levels that might cause significant impacts for both annoyance and public health and safety.

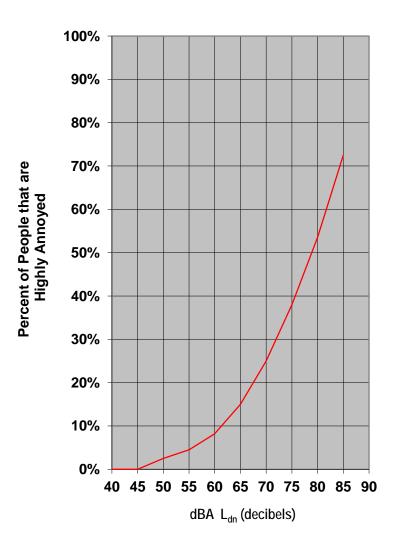
Noise impacts were considered for effects on the general population (both on MAFB and in the surrounding area), not necessarily for the construction/demolition workers. Construction companies who would perform the demolition work would be responsible for training their workers and ensuring appropriate hearing protection under applicable OSHA regulations.

4.6.1.1 Noise Interference. Noise in the environment may cause potential annoyance, interference with daily activities such as sleep or conversation, and disturbance to sensitive receptors such as churches, schools, or outdoor recreational areas. Public annoyance is one of the most common impacts associated with exposure to elevated noise levels. Annoyance due to increased noise has typically been measured via community surveys where the level of tolerance can vary greatly among individuals (USEPA, 1974). Research also indicates that the "type of neighborhood" a person inhabits influences their noise annoyance level, with instances of noise complaints being greater for those living in rural areas than in suburban or urban residential areas.

Most people are exposed to sound levels of 50-55 A-weighted decibels, day-night average sound level (dBA L_{dn}) or higher on a daily basis (refer back to Table 3-3). Studies conducted to determine noise impacts on various human activities have revealed that sound levels below 65 dBA L_{dn} do not significantly bother approximately 87 percent of the population (FICON 1992). The USEPA and Air Force have utilized the Schultz Curve shown in Figure 4-1 to predict annoyance levels. Based on the Schultz Curve, it is estimated that only about 13 percent of the population exposed to 65 dBA L_{dn} will report being highly annoyed, while 37 percent will say they are highly annoyed if exposed to a 75 dBA L_{dn} . The percent of people highly annoyed increases to approximately 70 percent at a noise level of 85 dBA L_{dn} (USEPA, 1974).

Numerous sociological surveys and recommendations of federal interagency councils have used the common benchmark of 65 dBA L_{dn} to determine land use compatibility around airports, highways, or other transportation corridors.

Figure 4-1 Schultz Curve Illustrating the Relationship Between Noise Levels and Human Annoyance Response



Source: Schultz 1978 as cited in Deadrick 2005

4.6.1.2 Construction/Demolition Noise. The main noise impacts would be from demolition activities at the various specified facilities. Construction and demolition activities are noisy by nature, with most of the louder noise originating from the operation of machinery at a job site. Noise associated with the operation of machinery on construction sites is typically short-term, intermittent, and highly localized. Typical construction machinery produces peak Sound Level Pressures (SPLs) ranging from 80 to 90 dBA at 50 ft from the source (Table 4-2). It is important to note that the peak SPL range for construction equipment noise does not take into account the ability of sound to be reflected/absorbed by nearby objects, which would further reduce noise levels.

TABLE 4-2 Noise Levels from Common Construction Equipment at Various Distances					
Construction Equipment	Typical Sound Pressure Level at 50 feet (dBA)	Typical Sound Pressure Level at 500 feet (dBA)	Typical Sound Pressure Level at 1,500 feet (dBA)		
Dozer (250-700 hp)	88	68	58		
Front End Loader (6-15 cu. yards.)	88	68	58		
Trucks (200-400 hp)	86	66	56		
Grader (13 to 16 ft. blade)	85	65	55		
Shovels (2-5 cu. yards.)	84	64	54		
Portable Generators (50-200 kW)	84	64	54		
Derrick Crane (11-20 tons)	83	63	53		
Mobile Crane (11-20 tons)	83	63	53		
Concrete Pumps (30-150 cu. yards.)	81	61	51		
Tractor (3/4 to 2 cu. yards.)	80	60	50		
Un-quieted Paving Breaker	80	60	50		
Quieted Paving Breaker	73	53	43		

- **4.6.1.3 Hearing Loss.** The potential for permanent hearing loss arises from direct exposure to noise on a regular, continuing long-term basis (16 hours a day for 40 years) to levels above 75 dBA L_{dn} . Based on a USEPA report (USEPA, 1974), hearing loss is not expected in people exposed to 75 dBA L_{dn} or less. The Federal Interagency Committee on Urban Noise states that hearing loss due to noise:
 - 1) may begin to occur in people exposed to long-term noise at or above 75 dBA L_{dn};
 - 2) will not likely occur in people exposed to noise between 70 and 75 dBA L_{dn}; and
 - 3) will not occur in people exposed to noise less than 70 dBA L_{dn} (FICON, 1992).
- **4.6.1.4 Interior Noise Reduction.** It is also important to consider that interior noise levels would be reduced by 18 to 27 dBA due to the noise-reducing properties of the building's construction materials. The Air Force normally uses 20 dBA to estimate interior noise reduction when windows are closed (Randolph AFB, 2003). Therefore, if construction machinery generates noise of 85-95 dBA, people inside nearby buildings would be exposed to 65-75 dBA.
- **4.6.1.5 Traffic Noise.** Though the proposed demolition activities would result in slight increases in traffic and its associated noise for areas surrounding the base, the increases would be minimal and temporary. In addition, demolition activities would be spread over a time period as indicated in Table 2-3, so no significant increases in traffic or traffic noise are projected for any particular time period. Therefore, it was not deemed necessary to analyze traffic noise in depth.
- **4.6.1.6 Other Noise Considerations.** Ambient background noise was not considered in the noise analysis. It is reasonable to assume that ambient background noise in the proposed action's ROI would have little or no effect on the calculated Day-Night Average Sound Levels, or L_{dn} . In calculating noise levels, louder sounds dominate the calculations. Overall, aircraft and other transportation-related noise are, and will continue to be, the dominant noise sources for Maxwell AFB.

In determining the significance of noise impacts, both the 65 dBA level for annoyance and the long-term exposure to 75 dBA level for potential adverse health effects have been considered.

4.6.2 Proposed Action

The primary source of noise would be construction and demolition activities, generated by heavy equipment and vehicles involved in demolition, debris removal, and site restoration. Table 4-2 shows potential noise levels from common construction equipment at varying distances from the machinery. According to these figures, noise levels would rise above 80 dB during peak operations. Outdoors, short-term, localized speech interference or annoyance near construction zones may be expected. However, exposure to these elevated noise levels

would generally be intermittent; therefore, extended disruption of normal activities is not anticipated. Since the proposed demolitions will be spread out over a period of several years, the noise impacts would be discontinuous.

According to the values in Table 4-2 (page 63), the typical noise levels fall to less than 70 dBA at a distance of 500 feet from the demolition sites. This decibel level would not cause undue annoyance to most people, as illustrated on the Schultz Curve, Figure 4-1. Most of the proposed demolition sites are well away from the installation boundary, so impacts are not expected to extend beyond the installation borders. Additionally, if the person exposed to the noise is indoors, the noise level is predicted to be reduced by approximately 20 dB. Therefore, the demolition noise levels for people in nearby buildings would not be expected to exceed approximately 70 dBA.

Though short-term demolition activities may produce peak noise levels above 75 dB, the proposed action would not generate noise levels that would exceed 75 dBA on a long-term basis. Therefore, the proposed action would not generate long-term elevated noise levels that would be detrimental to hearing. Noise-sensitive receptors such as on-base educational classrooms would only be exposed to construction noise intermittently; therefore, extended disruption of normal activities is not anticipated.

As a result of implementing the proposed action, intermittent, short-term impacts from increased noise would be expected. No long-term permanent impacts would occur.

4.6.3 No Action Alternative

Under the No Action Alternative, the status quo would remain for construction, demolition, renovations and periodic repairs on the existing facilities at the Main Base and Gunter Annex. There would be no change in noise levels from baseline conditions.

4.6.4 Mitigative Actions

Though the effects from construction noise are considered minimal, there are several best management practices that can be employed to further reduce its effect. One suggestion is to restrict the operation of extremely noisy equipment (e.g., brick cutters or jackhammers) to daytime hours. Most construction work on MAFB is required be completed between the hours of 7:00 a.m. and 5:00 p.m. Additionally, properly operating and maintained equipment (e.g., possessing mufflers, gaskets, and sharpened and lubricated blades), maximizing the distance of loud equipment from a residence, directing construction vehicles to use less noise-sensitive routes, fitting silencers to combustion engines, tightly fastening machinery covers or panels, isolating vibrating parts/damping, constructing sound barriers to reduce propagation, or shutting off/idling machinery between work periods are other suggestions to reduce construction-associated noises and disturbances (Eaton 2000; Suter 2002; Tempest 1985). Construction/demolition contractors would be responsible for ensuring that their workers are trained and protected from hearing loss according to all applicable OSHA regulations

4.7 CULTURAL RESOURCES

4.7.1 Significance Criteria and Methodology

Significant impacts to cultural properties would occur only if the proposed or alternative actions would adversely affect historic properties. An adverse effect is an undertaking that diminishes the integrity of a property's location, design, setting, materials, workmanship, feeling, or association. An adverse effect can occur through the destruction or alteration of the property, isolation from or alteration of the environment, introduction of intrusive elements (visual, audible, or atmospheric), neglect, and the transfer, lease, or sale of the property (Advisory Council on Historic Preservation and GSA Interagency Training Center 1995).

The nature and potential significance of cultural resources in the potentially affected areas were identified by considering the following definition: Historic properties, under 36 Code of Federal Regulations (CFR) Part 800, are defined as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP." For the purpose of these regulations this term includes artifacts, records, and remains that are related to and located within such properties. The term "eligible for inclusion in the National Register" includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet NRHP-listing criteria.

4.7.2 Proposed Action

The Proposed Action would involve demolition of several buildings 50 years or older. The eligibility of these buildings was assessed in the Maxwell AFB "Inventory and Assessment" (2012). Only one resource proposed for demolition, Facility 26, is recommended eligible for listing in the NRHP under Criterion C. As required by section 110 of the NHPA, if federal actions will substantially alter or destroy a National Register-eligible property, sufficient time and effort must be expended to properly record the property. This is usually performed as a Historic American Building Survey (HABS).

MAFB initiated consultation with the State Historic Preservation Office concerning the proposed demolition of facility 26, as required by Section 106 of the National Historic Preservation Act. No response was received from the State Historic Preservation Office within the prescribed 30 days. Documentation of this correspondence is included in Appendix B. However, Maxwell AFB agreed that Facility 26 was potentially eligible for inclusion in the NRHP, and would perform a HABS prior to the demolition. The requirement to perform a HABS is included in the project requirements within 42 CES/CE.

Prior to any proposed property transfer, SHPO consultation would occur, and a Memorandum of Agreement would set forth the requirements of the City of Montgomery for continued preservation of the historical resources.

4.7.3 No Action Alternative

Under the No Action Alternative, there would be no demolition or construction activities or change from the baseline condition. Given existing funding limitations, historical buildings would be minimally maintained.

4.7.4 Mitigative Actions

As mentioned above, a Historic American Building Survey (HABS) will be completed before the demolition of Maxwell facility #26, the base theater. In addition, proposed property transfers would be completed in accordance with all applicable state and federal regulations. SHPO consultation would occur, and memoranda of agreement concerning responsibilities for continued preservation of the facilities would be executed, as applicable.



Maxwell Facility #26, Base Theater Proposed for Demolition

4.8 HAZARDOUS MATERIALS

4.8.1 Significance Criteria and Methodology

The degree to which proposed construction, renovation, and demolition activities could affect the existing environmental management practices was considered in evaluating potential impacts to hazardous materials and wastes, including ERP sites. Impacts could result if non-hazardous/regulated and hazardous substances were collected, stored and/or disposed of improperly.

Impacts related to hazardous materials could be significant if:

- use of hazardous materials would pose unusual risks to personnel safety or would adversely impact the current hazardous materials management system;
- types or quantities of hazardous waste would be generated that could not be accommodated by the current management system;
- the proposed action would result in an increased likelihood of an uncontrolled release
 of hazardous materials that could contaminate soil, surface water, groundwater, or air;
 or
- implementing the proposed action would result in adverse impacts to an existing ERP site or other existing hazardous environmental condition.

4.8.2 Proposed Action

The use of hazardous materials during the implementation of the Proposed Action is expected to be limited to relatively small amounts of construction vehicle maintenance materials (fuel, oils, and lubricants). These materials would be required to be properly contained, manifested, and managed. Authorization from Maxwell AFB Environmental office would need to be acquired prior to use of hazardous materials. Procedures are in place within 42 CES for tracking and approving any hazardous materials brought onto the installation by construction contractors.

- **4.8.2.1 Asbestos.** Prior to any demolition activities, Base Environmental will review database records for the presence of asbestos-containing building materials (ACM). If no data is available or records appear to be insignificant or incomplete, an updated survey will be performed for the structure(s). If ACM is present the materials will be classified as either friable, Category I non-friable or Category II non-friable materials. Abatement activities will be performed prior to any demolition activities if materials are considered friable or will be deemed friable based on demolition activities. All asbestos comments, findings and guidelines will be submitted to the contracting officer prior to awarding contracts. The Maxwell AFB Asbestos Management Plan must be followed.
- **4.8.2.2 Lead-Based Paint.** LBP is currently considered present in most older buildings on Maxwell AFB and the Gunter Annex, especially on the exterior components of older

facilities. On Maxwell AFB and Gunter Annex, procedures stated in the Maxwell LBP Management Plan must be followed to properly manage facilities that have LBP. Note that historical activities do not preclude areas where LBP has been abated or not found to be LBP free. LBP may be present within the soils surrounding the facilities. If it is necessary to remove soils for off-site disposal, soils may be subject to random sampling and analysis to assess the presence or absence of lead in soil, and to properly categorize the soil for hazardous constituents per applicable state and federal regulations for disposal off-site.

4.8.2.3 Pesticides. Currently, at both Maxwell AFB and the Gunter Annex maintenance personnel trained in pesticide management are applying commercially-available pesticides. Maxwell AFB records indicate the historical application of several pesticides that are no longer approved for use. Although these pesticides were used legally in accordance with manufacturers' guidance and directions, the potential exists for residual concentrations to be present in the soil underlying the older facilities. Selective soil sampling has been and will be conducted along the exterior foundations (or as close as hardscape conditions will allow) to address the pesticide chlordane. The sampling would be used to ascertain the presence or absence of chlordane in the soil and to properly categorize the soil for hazardous constituents, if applicable, per state and federal regulations for disposal off-site if necessary. Typically, all soils will be left on site within the building footprint locations.

4.8.3 No Action Alternative

Under the No Action Alternative, there would be no change in the baseline conditions described in Section 3.8.2.

4.8.4 Mitigative Actions

Impacts with regard to hazardous materials from the proposed activities would not be expected to be significant. All hazardous materials would be managed according to state and federal regulations and according to the existing MAFB management plans. Therefore, no additional mitigative actions would be required.

4.9 SOLID WASTE AND HAZARDOUS WASTE

4.9.1 Significance Criteria and Methodology

- **4.9.1.1 Solid Waste.** The following factors were considered in evaluating potential impacts to solid waste management:
 - the degree to which proposed demolitions could affect the existing solid waste management program, and
 - capacity of the area landfills.
- **4.9.1.2 Hazardous Waste**. Impacts to hazardous waste management might be considered significant if:
 - the action resulted in the generation of 100 kilograms or more of hazardous waste or one kilogram or more of an acutely hazardous waste in a calendar month, which would result in increased regulatory requirements and/or a change in generator status;
 - implementation of the proposed action resulted in a spill or release of a reportable quantity of a hazardous substance;
 - the action resulted in manufacturing, use, or storage of a compound that requires notifying the pertinent regulatory agency according to Emergency Planning and Community Right-To-Know Act; or
 - the action resulted in an increase in the potential for exposure of the environment or public to any hazardous material or waste through release or disposal practices.

4.9.2 Proposed Action

4.9.2.1 Solid Waste. All of the proposed demolition activities would generate building debris, divided over a period of 8 years. The solid waste generated during proposed demolition projects would consist of spent building materials such as concrete, metals, lumber, miscellaneous materials and underground utilities such as sanitary sewer, storm water system, and water lines that are removed. The demolition contractor, under the oversight of the installation environmental office, would be responsible for managing any LBP and ACM according to local, state, and federal regulations. The contractor would also be responsible for segregating any recyclable materials such as steel and various metals.

According to Maxwell's solid waste management plan, clean construction debris must be recycled whenever possible. The following averages are from a recent 2012 demolition of dorm facilities on Maxwell.

Table 4-3 – Average Waste Disposal from 2012 Dormitory Demolitions

Material Entering Landfill	820 cubic yards/building (quantity will vary, depending on building	
	size).	
Recycled Mixed Steel	180 tons	
Recycled Copper	1.4 tons	
Recycled Aluminum	1 ton	

It is reasonable to assume that some of the buildings listed for demolition would have recyclables similar to these materials listed, which would divert material from the landfill.

Because of the age of the facilities and the likelihood of chlordane, asbestos, and lead-based paint contamination, some of the construction debris would not be recyclable. The proposed action would result in an increase in solid waste disposal over the next 8 years. However, the increase in waste would not affect the installation's status or procedures for waste disposal. Additionally, the North Montgomery C&D area of the landfill currently has a remaining life expectancy of 30 years. Therefore, there is sufficient capacity to handle the short-term increase in solid waste.

4.9.2.2 Hazardous Waste. Hazardous wastes are not expected to be generated as a result of the proposed demolitions. Any ACM- and LBP-containing materials removed/generated during the demolition and renovation of existing units would be managed in accordance with established installation management plans and state and federal regulations. As described in Section 4.8.1.1, a limited number of soil samples should be collected to ascertain the presence or absence of pesticides and lead so that any excess soil may be disposed of per applicable state and federal regulations.

Impacts with regard to hazardous wastes would not be expected from the proposed activities. All hazardous wastes would be managed according to state and federal regulations. Any potential increase would not affect the installation's hazardous waste generator status or procedures for hazardous waste disposal. The proposed action would not be expected to pose any additional health, safety, or environmental risk from hazardous waste.

4.9.3 No Action Alternative

Under the No Action Alternative, there would be no change in the baseline conditions described in Section 3.9.2.

4.9.4 Mitigative Actions

As described above, solid waste will be recycled whenever feasible. No other mitigative actions would be necessary.

4.10 ENVIRONMENTAL RESTORATION PROGRAM

4.10.1 Significance Criteria and Methodology

Potential impacts could be considered significant if implementing the proposed action would result in adverse impacts to an existing ERP site or negatively affect implementation of cleanup efforts.

4.10.2 Proposed Action

Some of the proposed demolitions are near current or closed ERP sites. Section 3.10.2 details these ERP sites. For several of the ERP sites, groundwater disturbance is prohibited. However, demolitions are expected to impact only the top 12-18 inches of soil. Therefore, it is highly unlikely that any groundwater would be encountered during the proposed action. The MAFB Environmental Restoration Program manager has reviewed the proposed demolitions and concurred that the proposed action should not have any impact on the ERP program or sites. Concurrence is documented in Appendix C.

4.10.3 No Action Alternative

Under the No Action Alternative, there would be no change in the baseline conditions described in Section 3.3.5. ERP investigation and remedial work would continue as scheduled.

4.10.4 Mitigative Actions

Impacts with regard to the ERP sites would not be expected from the proposed activities. As noted above, in the unlikely event groundwater was encountered, care would be taken during construction activities to ensure that groundwater resources are protected from contamination. Likewise, in the event groundwater is encountered during new housing construction, care would be taken during construction activities to ensure that workers are protected from contaminated groundwater.

Maxwell facility #18 is proposed for demolition



4.11 INFRASTRUCTURE AND UTILITIES

4.11.1 Significance Criteria and Methodology

The following factors were considered in evaluating potential impacts to infrastructure and utilities:

- the degree to which a utility service would have to alter operating practices and personnel requirements,
- the degree to which the change in demands from implementation of the proposed or alternative actions would impact the utility system's capacity,
- the degree to which Maxwell AFB would have to alter operating practices and personnel requirements to support the action, or
- the degree to which Maxwell or Gunter's ability to reliably procure the necessary utilities would be reduced or affected.

Recent dormitory demolitions were also examined for estimates of utility savings.

4.11.2 Proposed Action

Part of the objective of the proposed action is to lower the cost of operating and maintaining Air Force facilities. As the proposed demolitions are accomplished over the years, the installation's utility consumption would be expected to decrease, resulting in a positive impact on Maxwell's utility usage and costs. Previous facility closings and demolitions within one dormitory compound have resulted in a decrease in Maxwell's utility consumption of approximately 5% over the past two years (Riley, 2013). Local and regional impacts would be expected to be minimal because the proposed action would not result in a change in status in Maxwell's utility providers, availability or delivery systems. Impacts on the overall regional utility consumption would be minor.

4.11.2.1 Potable Water. The consumption and delivery system for potable water would be expected to remain fairly constant, due to the fact that overall base population would not change. Though water usage would be eliminated at the facilities proposed for demolition, water usage would increase in the facilities to which occupants are relocated.

Demolition activities may cause slight temporary increases due to watering of the demolition site to reduce airborne particulate matter, but the increase in water usage would be only a minor percentage of water available or used by the installation. Water delivery systems are adequate to supply short-term, intermittent increases, as there is no limit to the water available for the installation through the current utility system. After demolition activities are completed, water usage would be expected to return to near-baseline levels. Therefore, there would be little change in overall water usage.

- **4.11.2.2 Sanitary Sewer.** Overall domestic wastewater generation on the installation properties would not change significantly because the number of personnel and dependents assigned to MAFB would not change. As with potable water usage, the elimination of sanitary sewer service use within facilities proposed for demolition would be offset by increase in sewer usage in facilities to which occupants are relocated. Therefore, there would be little change from the baseline conditions in waste water generation and disposal.
- **4.11.2.3 Electricity.** Implementation of the proposed action on Maxwell and Gunter would result in decreased electricity consumption, resulting in a positive environmental impact. Estimates of electricity usage for the facilities proposed for demolition were provided by MAFB Asset Management utility personnel. (Estimates are included in Appendix C.) Based on these estimates, the proposed demolitions could decrease MAFB electrical usage by as much as 8.1%. (This projection does not include demolitions already carried out since the 20/20 baseline figures from year 2006.) Therefore, the proposed demolitions would assist in meeting the AF energy and cost reduction goals. However, considering MAFB's usage compared to the overall electrical consumption for the Montgomery Metropolitan area, there would be negligible change to local and regional electrical usage or status.
- **4.11.2.4 Natural Gas.** Implementation of the proposed action on Maxwell and Gunter would result in decreased natural gas consumption, resulting in a positive environmental impact. Estimates of natural gas usage for the facilities proposed for demolition were provided by MAFB Asset Management utility personnel. (Estimates are included in Appendix D.) Based on these estimates, the proposed demolitions could decrease natural gas usage by as much as 10%. (This projection does not include demolitions already carried out since the 20/20 baseline figures from year 2006.) Therefore, the proposed demolitions would assist in meeting the AF energy and cost reduction goals. However, considering MAFB's usage compared to the overall natural gas consumption for the Montgomery Metropolitan area, there would be negligible change to local and regional usage or status.

4.11.3 No Action Alternative

Under the no action alternative, facilities would gradually be vacated and closed to sit dormant. Relocation of occupants would still need to take place as the facilities continued to deteriorate, because occupants would eventually need more suitable facilities. Utility consumption would be expected to decrease as minimal utilities would be used to maintain the obsolete or vacant facilities, resulting in a positive environmental impact. However, this alternative would not result in a change in status in Maxwell's utility providers, availability or delivery systems. Therefore, overall utility impacts would be minor.

4.11.4 Mitigative Actions

Implementation of the proposed or alternative actions would not increase overall energy demands or result in any change in status; therefore, no mitigative actions would be required.

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5 OTHER CONSIDERATIONS

5.1 CUMULATIVE IMPACTS

A cumulative impact, as defined by the CEQ (40 CFR 1508.7), is the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of which agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." In accordance with NEPA, a discussion of cumulative impacts resulting from projects that are proposed or anticipated over the foreseeable future is required.

To identify cumulative impacts, the analysis needs to address two fundamental questions:

Does a relationship exist such that affected resource areas of the proposed action or alternatives might interact with the affected resource areas of past, present, or reasonable foreseeable action?

If such a relationship exists, then does an EA reveal any potentially significant impacts not identified when the proposed action is considered alone?

5.1.1 Approach to Cumulative Impacts Analysis

When assessing cumulative impacts, other proposed projects are considered when they are foreseeable at Maxwell AFB and surrounding areas within the ROI. These actions are not directly related to the proposed or alternative actions evaluated in this EA; therefore, this EA addresses the environmental impacts of these other actions only in the context of potential cumulative impacts, if any. Analyzing cumulative impacts involves:

- the geographic area of the effects,
- the time frame in which the impacts would be likely to occur, and
- a description of what resources could potentially be cumulatively affected.

For most of the environmental resources, the geographic area (or ROI) affected is confined to Maxwell AFB and Gunter Annex properties and their immediately-adjacent properties. For the purpose of this analysis, the time frame for cumulative impacts is considered to be through fiscal year 2020, which is the year the MAFB demolition activities are proposed to be largely completed. Potential impacts were considered as if the other known proposed projects would also occur within that 7-year period.

As a military installation, Maxwell AFB is an active and dynamic environment. Mission and training requirements at Maxwell and Gunter Annex are subject to changes in response to defense policies, current threats, and tactical and technological advances. In addition to

regular maintenance and repairs, such changes may require facility renovations, new construction or additional equipment. It is not practicable to assess all the short-term and long-term minor projects, but the known and foreseeable major projects in the ROI are listed in the section below.

The range of discussion has been limited to the resources that could be permanently negatively affected by the proposed action and the identified past, present, and future actions.

5.1.2 Past, Current and Reasonably-Foreseeable Action in the ROI

Table 5-1 on the following page lists known major proposed actions at MAFB and the surrounding area. Many of the City's redevelopment and revitalization efforts are having, and will continue to have, a beneficial impact to the community and neighborhood surrounding MAFB. However, since the proposed demolitions will take place solely within the MAFB boundaries, the project areas will not directly overlap with the areas of the City's actions. Therefore, the proposed action is expected to have little or no impact on the surrounding neighborhoods. Any cumulative impacts would be expected to be minimal.

Table 5-1 – Past, Present, and Reasonably-Foreseeable Action in the ROI

City of Montgomery

Bell Street Improvements – The City of Montgomery recently completed a project to widen Maxwell Boulevard (formerly Bell Street) from I-65 to MAFB. The project included demolition of deteriorated properties along the street as well as installation of planted median, sidewalks, and lighting to enhance the streetscape.

Bell Street Neighborhood Plan (2008-2018) - Includes beautification and restoration projects for 603 acres south of Maxwell AFB. Project examples include: creating a community garden, creating an urban farm using existing vacant land, protecting manufacturing zoning in the area, building a fishing pier along the river, changing one-way streets to 2-way streets, and renovating the Day Street Park.

Montgomery Riverwalk – Continued improvements to Montgomery downtown area, Wright Brothers Park overlooking the Alabama River, extending the Riverwalk from downtown toward Powder Magazine Park (west of I-65), installation of boat ramp west of I-65.

Land Exchange Proposal - The City of Montgomery and MAFB are considering a joint proposal in which several small parcels of land would be exchanged between the City and the Air Force. This would be beneficial to the City for redevelopment opportunities along Maxwell Boulevard, and would be beneficial to MAFB for providing adjoining land for future use and protecting the installation boundaries. Potential impacts will be evaluated in a separate Environmental Assessment.

Maxwell AFB

Airfield Improvements - Maxwell AFB plans to mill and overlay taxiways and runway 15/33. There are also long-range plans to construct a new Air Traffic Control Tower; construct a new ramp and engine run-up pad west of Buildings 1454 and 1455; and develop a new Assault Landing Zone in southwest quadrant of airfield.

Roadway Improvements - A road to connect S. Mitchell Street to the corner of Maxwell and LeMay is planned.

Dorm and Academic Areas of MAFB - The eastern end of Chestnut Street is planned to be closed, and several dorms and two parking structures are planned to be constructed in the area bounded by Chestnut Street to the south, LeMay Plaza to the west, March Road to the north, and Chennault Circle to the east. A large surface lot is planned to be constructed in the northwest quadrant of the intersection of Chestnut Street and LeMay Plaza. Future development is also planned to the west of this new lot and east of Keysor Pass, and a proposed roadway would provide alternate access to the Officers Training School.

CVI Gate - The Kelly Street Gate is being considered for closure. A commercial vehicle inspection (CVI) gate is being considered on U.S. Highway 31 in the southwest corner of MAFB, south of FamCamp.

Community Service Facilities – There are long-term plans to relocate and reconstruct the Commissary and Base Exchange, and configure the layout to provide shared parking between the two buildings. The timetable for relocation is uncertain.

FamCamp Improvements – Over the next 5-7 years, improvements at MAFB Family Camping area may include: construction of a new bath house and renovation of an older bath house, construction of an administrative/recreation center, additional trailer pads and reconfiguration of a section of existing pads, additional playground areas and other recreational amenities.

JAG School Addition – To house the JAG School program, a facility addition is planned between existing facilities 693 and 694 in the central portion of MAFB.

Gunter Commissary – A new Commissary is currently under construction at Gunter Annex.

5.1.3 Air Quality

Implementation of the demolition plan at Maxwell AFB would result in short-term increases in combustive and fugitive dust emissions during intermittent periods of demolition. The long-term impact may actually be a decrease in emissions due to the permanent removal of emission sources such as boilers and generators associated with the buildings that are proposed to be demolished. The other identified activities, both on and off the installation, could also produce localized, elevated air pollutant concentrations that would occur for a short duration during construction activities and would be eliminated after the activity is completed. When considered with other foreseeable actions, the proposed action would not be expected to contribute to any negative long-term impacts on the air quality of Montgomery or AQCR 2.

5.1.4 Water and Soil Resources

Multiple construction projects could be underway simultaneously at MAFB and along Maxwell Boulevard, and would vary in the extent of soil disturbance. In the short term, soil disturbance and shallow excavation required during demolition and construction projects would primarily require addressing sediment control and runoff. The proposed action, together with the other identified foreseeable actions, would contribute to overall soil erosion and storm water sediment loading in the vicinity of Maxwell AFB. Implementation of a Storm Water Pollution Prevention Plan would reduce these impacts. In accordance with ADEM standards, all projects, whether accomplished by MAFB or another entity, should implement construction best management practices to prevent erosion of soil and degradation of water quality in nearby drainage ways and waterways.

The long-term cumulative effects of the proposed demolition projects would appear to be neutral or positive overall. The proposed action would be expected to result in less impermeable surface area and restore more open green space for infiltration and ground water recharge. Therefore, when considered together with the other foreseeable actions, the proposed action would not be expected to contribute toward any long-term degradation of soil conditions or water quality.

5.1.5 Noise

Additional construction projects at MAFB or in the surrounding neighborhoods may be occurring during the same period as the proposed action. Slightly elevated noise levels would be expected in the immediate vicinity of the demolition and construction sites.

Using the figures for construction noise presented in Table 4-2, the area of elevated noise from construction or demolition would not normally extend beyond approximately 500 feet from the construction/demolition sites. Since the demolition activities associated with the proposed action are confined within the boundaries of MAFB, the ROIs for noise would not be expected to overlap, so there is little to no expected cumulative effect. Construction and demolition activities would normally be limited to daytime business hours and would not

disrupt normal activities. Due to the temporary, intermittent and localized nature of the proposed demolition and construction noise, no cumulative impacts are likely.

5.1.6 Cultural Resources

The proposed action would not affect any cultural resources outside the boundaries of MAFB. The other foreseen actions would not affect any cultural resources connected to MAFB. Therefore, the impacts would be the same as probable impacts from the proposed action, as discussed in section 4.7.2.

5.1.7 Hazardous Materials, Solid and Hazardous Wastes

Demolition activity under the proposed action would cause intermittent increases in solid waste disposal. Some of the past improvements along Maxwell Blvd. also involved demolitions which created solid waste. When considered together with the other foreseeable actions, the proposed action would contribute to an intermittent cumulative increase in solid waste generation. However, the existing solid waste management systems and the Construction and Demolition area of the North Montgomery Landfill have sufficient capacity to accommodate the solid waste.

The proposed action may require the management of ACM, LBP, and pesticide-impacted soils during demolition of existing facilities. Management of these waste streams would occur under existing Maxwell AFB management plans and procedures, and would not result in adverse impacts.

When considered together with other foreseeable actions, the disposal of these wastes would not have any impact on hazardous waste generator status or disposal practices. Therefore, the proposed action would not be expected to contribute to any negative cumulative impacts to solid or hazardous waste status or the capability for disposing of the wastes.

5.1.8 Infrastructure and Utilities

The proposed action would be expected to lower facility square footage and associated utility usage at MAFB and its Gunter Annex, thereby helping to meet the Air Force goals of reducing unnecessary infrastructure and resources needed to maintain its facilities. This would result in a positive environmental impact.

The City of Montgomery's improvements along Maxwell Boulevard have had a beneficial impact on the neighborhood infrastructure along this corridor. Widening Maxwell Boulevard has resulted in better traffic flow, more attractive street views, and elimination of deteriorated properties. Further redevelopment efforts in the Bell Street neighborhood would have an unknown impact on infrastructure and utilities. Redevelopment efforts would be expected to have a positive impact on the infrastructure of surrounding neighborhoods, yet additional housing or business development may result in higher utility usage.

However, the proposed action's contribution to cumulative impacts would be expected to be minimal and beneficial. Since the demolitions take place solely within the installation boundaries, there would be little to no overlap in infrastructure impacts. The utility usage impacts of the proposed action would be minor when considered with the utility usage for the Montgomery Metropolitan Area as a whole.

5.1.9 Socioeconomics

Several other projects are likely to be ongoing during the proposed or alternative actions. The City of Montgomery's redevelopment plans in the Maxwell Blvd. area that surrounds MAFB may contribute to beneficial changes in population, housing, or economic development. The proposed action would, however, have little impact beyond the boundaries of the MAFB installation. Any impact to the local economy through demolition-associated expenditures would be positive but minimal when compared with the Montgomery Metropolitan Area as a whole.

5.1.10 Environmental Justice and Protection of Children

The improvements by the City of Montgomery along Maxwell Boulevard and in surrounding neighborhoods would be expected to have beneficial impacts to the surrounding area and its population. The impacts associated with the proposed action would not disproportionately affect minority or low-income personnel in the project area or contribute to negative cumulative effects for environmental justice populations.

5.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

NEPA CEQ regulations require that environmental analysis include identification of "any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented" (40 CFR Section 1502.16). Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects the uses of these resources may have on future generations. Irreversible impacts primarily result from the use or destruction of a specific finite resource (e.g., energy and nonrenewable resources) that cannot be replaced within a reasonable time frame or cannot be undone. Irretrievable resource commitments involve changing the outputs or commodities of an affected resource that cannot be restored as a result of the action (e.g., loss of recreational use of land due to gaining undisturbed wildlife refuge area).

Implementing the proposed action would require a commitment of natural, physical, human and fiscal resources. The proposed demolition and construction activities would result in irreversible impacts due to the consumption of energy, fossil fuel products such as fuel and lubricants, and human resources of labor. Fiscal resources would also be expended to accomplish the proposed action. Constructing the proposed turn-around area on the airfield

would require consumption of small amounts of resources such as cement, aggregate, or bituminous material. These impacts would be minor, and the resources required should generally be in sufficient supply so that the implementation of the proposed action would not have a detrimental effect on the continued or future availability of the resources.

Soil disturbance may result in the slight loss of surface soil from the demolition sites; however, construction best management practices would localize and minimize soil loss.

The demolition of the base theater would be considered an irreversible and irretrievable impact due to the historic nature of this particular facility.

Irretrievable commitments would include loss of use of the facilities proposed for demolition. This would be true for both the proposed action and the No Action Alternative, since the facilities would eventually fall into a state of disrepair and be unusable. Loss of the facilities would not be irreversible since future facilities could be rebuilt on the proposed demolition sites.

5.3 RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

Proposed actions are assessed for both short-term and long-term impacts. The short-term use of resources is weighed against the long-term productivity – in particular, the consistency of the project with long-term environmental, economic, and local and regional planning objectives.

The proposed action would result in short-term use of resources for demolition and construction activities. Some resources that would be valuable in the long term (e.g., fossil fuels, fiscal resources) are being spent to achieve higher productivity per unit resource in the long term by reducing the need for energy, maintenance and operational costs in the aging facilities.

The proposed action may also generate a small short-term increase in employment, income, and net fiscal benefits to the surrounding community during the period of proposed demolitions. This minimal increase would not necessarily result in a long-term impact on the Montgomery area. The proposed action would not prevent future development or redevelopment, or interfere with the long-term availability of resources.

Local short-term impacts from the use of resources would be consistent with the maintenance and enhancement of long-term productivity for MAFB, the local community, and the region.

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6.0 REFERENCES

6.1 LIST OF PREPARERS

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6.2 DOCUMENTS AND PUBLICATIONS

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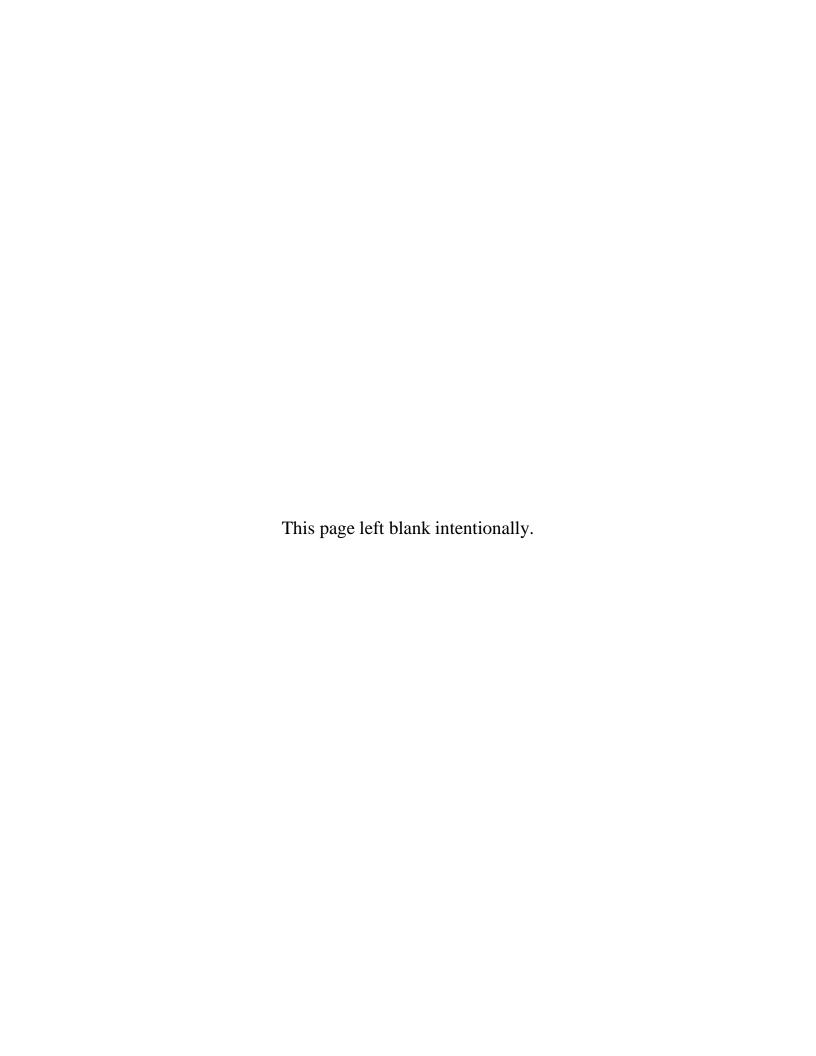
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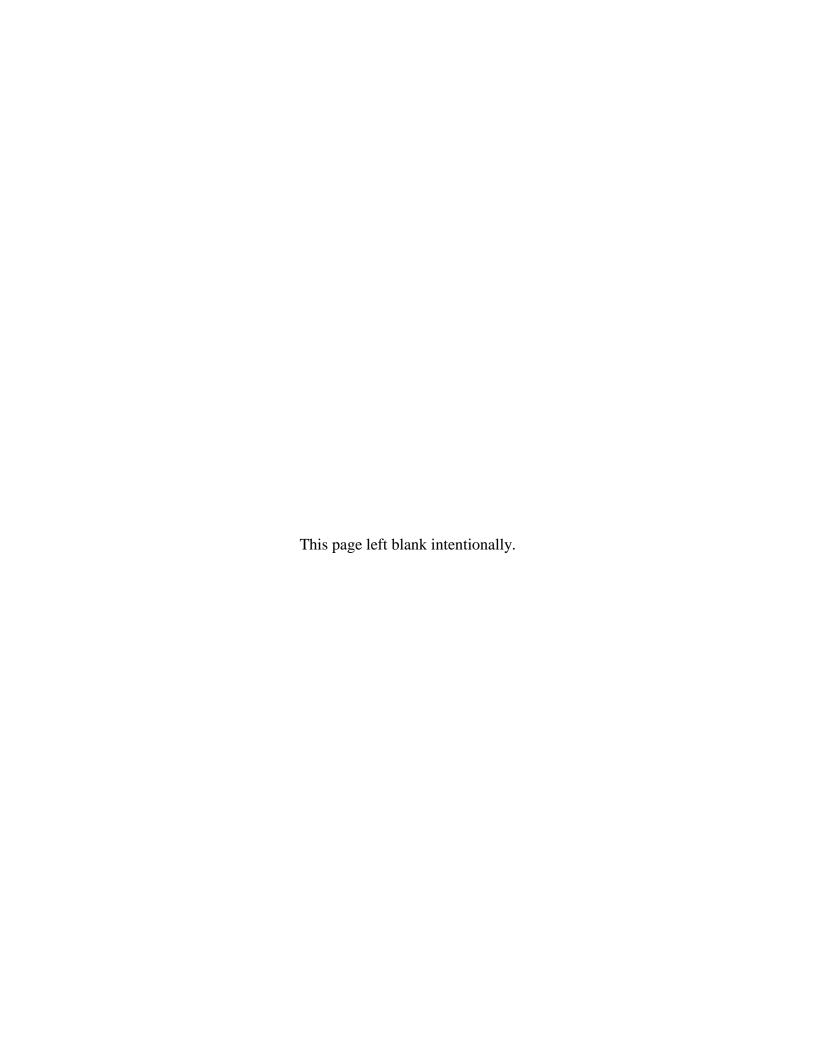
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APPENDIX A

INTERGOVERNMENTAL, INTERAGENCY, AND PUBLIC INVOLVEMENT



SUMMARY OF INTERGOVERNMENTAL, INTERAGENCY, AND PUBLIC INVOLVEMENT

Executive Order (EO) 12372, *Intergovernmental Review of Federal Programs* (July 14, 1982) requires federal agencies to cooperate with and consider state and local views in implementing a federal proposal. EO 12372 is implemented by the Air Force in accordance with Air Force Instruction (AFI) 32-7060, *Interagency and Intergovernmental Coordination for Environmental Planning*.

Federal, state, and local agencies with jurisdiction that could be affected by the proposed or alternative actions have been notified and consulted. Initial scoping letters were sent Dec. 26, 2012 to request input from governments, agencies, and organizations that may have an interest in the proposed action, and to identify potential environmental impacts. A sample scoping letter, list of recipients, and responses received are included in this Appendix.

The Draft EA and Draft Finding of No Significant Impact (FONSI) were made available to the public for review. A Public Notice of Availability was published in the local paper (Montgomery Advertiser) on August 25, 2013, and copies of the Draft EA were placed at the Montgomery Public Library and Air University Library. The Proposed Action was also announced on local television. The public comment period extended through September 13, 2013. No public comments were received.

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Ms. Augustine Asbury Alabama-Quassarte Tribal Town of the Creek Nation 117 North Main St. Wetumka, OK 74883

Mr. Tiger Hobia Kialegee Tribal Town of the Creek Nation of Oklahoma Mekko PO Box 332 Wetumka, OK 74883

Mr. Kenneth H. Carleton Tribal Archaeologist Mississippi Band of Choctaw Indians PO Box 6257 Choctaw, MS 39350

Mr. Alfred Berryhill Cultural Preservation Manager Muscogee (Creek) Nation PO Box 580 Okmulgee, OK 74447

Mr. Robert McGhee Tribal Administrator Poarch Band of Creek Indians 5811 Jack Spring Rd Atmore, AL 36502

Mr. Charles Coleman Tribal Historic Preservation Officer Thlopthlocco Tribal Town PO Box 188 Okemah, OK 74859 ITT Systems Corporation Maxwell Base Operating Services 400 Cannon Street Maxwell AFB. AL 36112 334-953-1760 334-953-3761 Fax

ITT EXELIS

December 21, 2012
Ms. Augustine Asbury
Alabama-Quassarte Tribal Town of the Creek Nation
117 North Main St.
Wetumka, OK 74883

RE: Proposed Demolition and Consolidation Plan Maxwell Air Force Base, Alabama

Dear Ms. Asbury:

The United States Air Force (USAF), through the 42d Air Base Wing at Maxwell Air Force Base, is preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA). As a result of a memoranda signed by President Obama in June, 2010, the Air Force has implemented an initiative to reduce costs and energy usage throughout the Air Force. The overall goal is to reduce both the "facility footprint" and energy usage by 20 percent by the year 2020. The 20/20 initiative requires Air Force installations to eliminate surplus and inefficient facilities, maximize use of existing facilities, and maintain only the infrastructure that will effectively and efficiently support the Air Force mission.

In order to meet the goals, Maxwell Air Force Base Asset Management personnel have formulated a comprehensive Demolition and Consolidation Plan (the "Proposed Action"). The plan proposes to demolish unnecessary, unused, and unserviceable facilities, and consolidate units into more efficient work space. The Proposed Action deals only with reduction in infrastructure in an effort to reduce energy usage and operation and maintenance costs. The Proposed Action does not include any planned or foreseeable reduction in workforce or changes in mission at Maxwell AFB or Gunter Annex.

The Proposed Action also includes transfer of 6 facilities to the Federal Bureau of Prisons for use at the Federal Prison Camp located at Maxwell AFB, and the transfer of 8 facilities at Gunter Annex to the City of Montgomery. The facilities at Gunter are located on land leased by Maxwell AFB from the City of Montgomery. The lease would be terminated, and the facilities transferred to the City.

All proposed demolitions would take place within the installation boundaries of Maxwell Air Force Base and its Gunter Annex. A phased approach has been formulated, taking place from 2013 through 2020. Some adjustments to the proposed timetable may be necessary as funding is available and consolidation moves are accomplished.

The Proposed Action includes facility disposal according to the following Demolition and Consolidation Plan:

Year	Number of Facilities Proposed for Disposal	Facility	Reduction,
		Approximate Square Footage	
2013	11 demolitions	232,000	
2014	7 demolitions, 6 transfer to Federal Prison Camp	84,000	
2015	7 demolitions	181,000	
2016	2 demolitions	36,000	
2017	4 demolitions	48,000	· ·
2018	2 demolitions	14,000	
2019	1 demolitions, 8 transfer to City of Montgomery	64,000	
2020	4 demolitions	70,000	

The EA will evaluate the potential effects on the human and natural environment that may result from the implementation of the Proposed Action. The USAF will also consider the potential effects of the No-Action Alternative.

In accordance with Executive Order 12372, Intergovernmental Review of Federal Programs and Air Force Instruction 32-7060, Interagency and Intergovernmental Coordination for Environmental Planning (IICEP), we are requesting any comments or concerns you may have with the proposed project. In order to properly evaluate cumulative impacts, we are also requesting that you identify any major projects (recently conducted, presently underway, or planned for the near future) that are in the vicinity of the Proposed Action.

Please send your comments, concerns and identified projects within 30 days of receipt of this letter. Comment may be submitted to Mr Jeff Jones, Environmental Manager, ITT Exelis Mission Systems, 42 CES/CEV, 400 Cannon Street, Maxwell AFB, AL 36112.

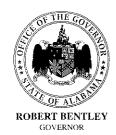
Jeff Jones, CSP, CHMM, CHST

ESH Manager, ITT Exelis Mission Systems

42CES/CEV

PRIVACY ADVISORY

Your comments on this Proposed Action are requested. Letters or other written or oral comments provided to Maxwell Air Force Base may be published in the Final EA. As required by law, comments will be addressed in the Final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a comment or to fulfill requests for copies of the Final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.



STATE OF ALABAMA EMERGENCY MANAGEMENT AGENCY

898 COUNTY ROAD 41 • P.O. DRAWER 2160 • CLANTON, ALABAMA 35046-2160 (205) 280-2200 FAX # (205) 280-2495



January 9, 2013

Mr. Jeff Jones Environmental Manager ITT Exelis Mission Systems 42 CES/CEV 400 Cannon Street Maxwell AFB, AL 36112

SUBJECT:

Proposed Demolition and Consolidation Plan

Maxwell Air Force Base, Alabama

RE: Your Letter, same subject, dated 12/21/12

Dear Mr. Jones:

My Logistics Section staff (Sam Guerrera and Randy Branson) visited with you on January 4, 2013. The purpose of their visit was to gain clarification and knowledge of the Proposed Demolition and Consolidation Plan. As a result of their meeting with you, they were able to confirm that a portion of the Plan has a direct and detrimental effect on Alabama Emergency Management Agency (AEMA) State Operations Staging Area (SOSA) operations at Maxwell AFB.

During a large disaster, AEMA conducts SOSA commodity staging area activities on the Assault strip (Runway 17/35) and the intersecting Taxiway 3036 (closed) east of the Runway 17/35 all the way to the fence line (Bldg. 1446), and on Taxiway A east of the Assault strip and continuing south to approximately the Crosswind Apron 3037 (closed). In addition to AEMA's use of this area for staging, FEMA Region IV jointly conducts Federal Commodity staging operations (ISB/FOSA) in the same area. FEMA will provide their comments under separate cover.

Demolition of Taxiway 3036 (closed) will dramatically compromise AEMA's capability to respond to the emergency commodity needs within the state as well as the continued viability of the joint missions achieved by the collocation of FEMA with AEMA during disaster recovery.

AEMA requests that the Proposed Demolition of Taxiway 3036 (closed) be reconsidered. Please see the attached map indicating the area AEMA requests be removed from the Proposed Demolition and Consolidation Plan.

My POC for the Maxwell SOSA is Randy Branson. Please feel free to contact him if you have any questions or comments. He may be reached at <u>Randel.branson@ema.alabama.gov</u> or 205-280-2479.

Sincerely,

Art Faulkner Director

AF:rlb/sd

Cc: R. Bond Luddeke

FEMA Region IV – Logistics 3003 Chamblee Tucker Rd

Atlanta, GA 30341

ENCLOSURE

NOT TO SOME

ITT Systems Corporation Maxwell Base Operating Services 400 Cannon Street Maxwell AFB, AL 36112

334-953-1760 334-953-3761 Fax

ITT EXELIS

February 12, 2013

Mr. Art Faulkner, Director Alabama Emergency Management Agency P.O. Drawer 2160 Clanton, AL 35046-2160

Subject: Proposed Demolition and Consolidation Plan

Dear Mr. Faulkner,

Thank you so much for your response to our scoping letter for the proposed Demolition and Consolidation Plan and its Environmental Assessment (EA) process. As intended by this process, we certainly invite your input and appreciate your effort to make us aware of considerations that could possibly impact your emergency response operations in cooperation with Maxwell Air Force Base.

You made us aware that both the Alabama and Federal Emergency Management Agencies use part of the closed Taxiway (#3036 – the highlighted area on your map) as a staging area for emergency operations. As a result of this important consideration, the leaders in our 42d Civil Engineering Squadron have removed this portion from the proposed demolition plan. Our documents for the Environmental Assessment will be revised, as shown in the attached map and table, as we continue to formalize plans for this proposed action.

We hope that this solution satisfactorily addresses the considerations you mentioned. Please feel free to contact us if you have further questions or if we can assist in any way. We look forward to continuing to work closely with you in the future.

Sincerely.

Jeff Jones, CSP, CHMM, CHST

ESH Manager, ITT Exelis Mission Systems

42 CES/CEV

Cc:

R. Bond Luddeke

FEMA Region IV – Logistics 3003 Chamblee Tucker Rd

Atlanta, GA 30341

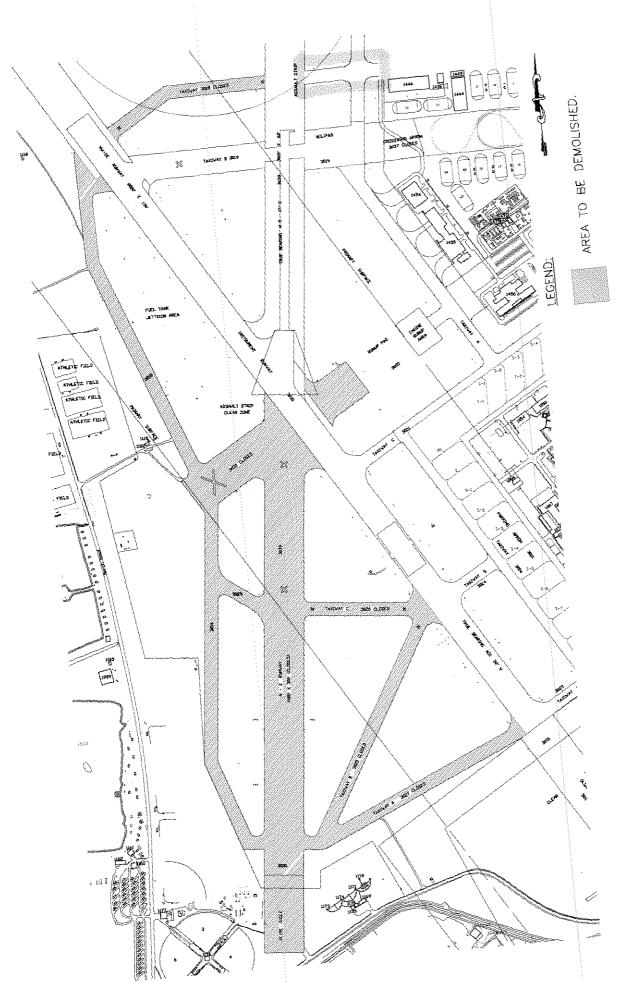
Randy Branson AEMA

P.O. Drawer 2160

Clanton, AL 35046-2160

Revised Table of Proposed Pavement Demolition:

Maxwell Facility Number(s)	Description	Approx. Area in Square Yards
3035	Previous Runway	34,833
3031	Previous Runway Overrun, South End	33,333
3014, 3015, 3025, 3026, 3027, 3028, 3029	Previous Taxiways	122,033
3039	Previous Runway, Southern Portion	133,334
	Total Area	323,533



NOT TO SCALE

Map Revision 2/8/13 Area Removed from Proposed Demolition Plans

OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

From:

JONES, JEFFREY L CTR USAF AETC 42 CES/CEV

Sent:

Wednesday, January 30, 2013 9:20 AM

To:

OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

Subject:

FW: Impact on Maxwell AFB ISB

Signed By:

jeffrey.jones.42.ctr@us.af.mil

Beth,

For backup to document the request by AL EMA.

Jeff

----Original Message----

From: ALLEN, MICHAEL S GS-14 USAF AETC 42 CES/CL

Sent: Monday, January 07, 2013 3:27 PM

To: ARNOLD, GARY B CTR USAF AETC 42 CES/DM; JONES, JEFFREY L CTR USAF AETC

42 CES/CEV

Cc: NICHOLS, WILMER E CTR USAF AETC 42 CES/CEP; LEDGER, DARREN L GS-11 USAF

AETC 42 CES/CEY

Subject: RE: Impact on Maxwell AFB ISB

I wasn't aware we had identified anything to the north of the active runway to demolish!

Also recall that Col Edwards wanted ALL airfield demolition put on the back burner for the foreseeable future.

Please assure FEMA that there are no plans to demolish the area of concern. Also, when contacting folks on these environmental assessments, is there a way to let folks know that these are preliminary planning efforts that have not yet been vetted or approved?

Thanks,

Mickey Allen, PE, GS-14, DAFC Director, 42d Civil Engineer Squadron Maxwell AFB & Gunter Annex AL (334)953-3544 DSN 493-3544 Cell 334-799-4798

----Original Message----

From: ARNOLD, GARY B CTR USAF AETC 42 CES/DM

Sent: Monday, January 07, 2013 2:10 PM

To: JONES, JEFFREY L CTR USAF AETC 42 CES/CEV; ALLEN, MICHAEL S GS-14 USAF

AETC 42 CES/CL

Cc: NICHOLS, WILMER E CTR USAF AETC 42 CES/CEP

Subject: FW: Impact on Maxwell AFB ISB

Looks like part of the EA for demo has gotten some attention. I think we can accommodate and not demolish the portion he is talking about, especially since we will probably not get the funding to demolish airfield pavements.

Bruce

Gary B. "Bruce" Arnold, CAPM Civil Engineer Manager (BOS Contractor) ITT Exelis, Mission Systems Division 400 Cannon Street, Bldg 1060 Maxwell AFB, AL 36112

Phone: 953-3944 (DSN 493-3944)

Cell: 334-558-5296

gary.arnold.4.ctr@us.af.mil

----Original Message----

From: MOORE, RONNIE W CTR USAF AETC 42 CES/CEX

Sent: Monday, January 07, 2013 11:37 AM

To: BARNHART, MARK S CTR USAF AETC 42 OSF/DM Cc: ARNOLD, GARY B CTR USAF AETC 42 CES/DM Subject: FW: Impact on Maxwell AFB ISB

I just got this concern from Mr Luddeke about the possibility of demo of some of the area they use on the flight line when they set up operations. He is of concern and is going to request this area not be demolished.

Ron Moore

42 CES/CEX 953-7035

Emergency Management Supervisor

From: Luddeke, R [mailto:R.Luddeke@fema.dhs.gov]

Sent: Monday, January 07, 2013 10:30 AM

To: MOORE, RONNIE W CTR USAF AETC 42 CES/CEX; Southerland, John

Cc: ernest.matacotta@us.army.mil; Hare, Kertz M;

Randel.branson@ema.alabama.gov; Sam Guerrera (Sam.Guerrera@ema.alabama.gov)

Subject: FW: Impact on Maxwell AFB ISB

Sirs,

For SA,

It has come to my attention that Maxwell AFB is in the process making demolition plans for various sections of the base. I spoke this morning with Jeff Jones, currently the ESH Manager, ITT Exelis Mission Systems of Maxwell AFB (334-953-5757). Concerning areas that both FEMA and Alabama EMA utilize, he indicated that one paved section by the assault strip that is in current disrepair is on the preliminary schedule for demolition. The section in question is the turn off of our main check-in lanes and offices, just north of where we place USACE for joint power and commodity missions.

It is marked "area to be demolished" on the attached map.

Failure to keep this section open compromises the viability of joint power and commodity missions and collocating FEMA and the State of Alabama.

I will be sending a formal letter to Mr. Jones at Maxwell AFB expressing me concerns for emergency response commodity and power missions at the Maxwell Staging area. I will also send it to Mr. Moore, the base EM. Any input prior to my letter would be appreciated.

R Bond Luddeke

FEMA Region IV - Logistics

Distribution Management

337-636-4751

From: Sam Guerrera [mailto:Sam:Guerrera@ema.alabama.gov]

Sent: Friday, January 04, 2013 9:02 AM To: kurtz.hare@fema.dhs.gov; Luddeke, R

Cc: Randel Branson

Subject: Impact on Maxwell AFB: ISB

Gentlemen,

First of all, I've been moved over as AEMA's Logistics Section Chief and Randy Branson will be our Liaison to the Maxwell SOSA.

Secondly attached you will find a letter from Maxwell AFB on a proposal for comment concerning demolition that will impact the ISB/SOSA.

He and I are going there this morning to discuss this in more detail. We'll keep you informed.

Sam Guerrera

Logistics Section Chief

Alabama Emergency Management Agency

Office-205-280-2474

Cell- 205-351-1630

1*77*44

OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

Subject:

FW: Proposed Demolition and Consolidation Plan Maxwell Air Force Base, Alabama

----Original Message----

From: Gissentanna.Larry@epamail.epa.gov [mailto:Gissentanna.Larry@epamail.epa.gov] Sent: Wednesday, January 23, 2013 1:51 PM To: JONES, JEFFREY L CTR USAF AETC 42 CES/CEV

Cc: Mueller.Heinz@epamail.epa.gov; Buskey.Traci@epamail.epa.gov

Subject: RE: Proposed Demolition and Consolidation Plan Maxwell Air Force Base, Alabama

ITT Systems Corporation
Maxwell Base Operating Services
Attn: Mr Jeff Jones, ESH Manager
ITT Exelis Mission Systems
400 Cannon Street
Maxwell AFB, AL 36112

Dear Mr Jeff Jones,

Consistent with Section 102(2)(c) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) appreciates the opportunity to provide scoping comments on the Proposed Environmental Assessment for the Proposed Demolition and Consolidation Plan at Maxwell Air Force Base, Alabama.

EPA's preliminary concerns at this time can be summarized to include the following:

- * Air Quality The project must also be consistent with General Conformity requirements to the extent that predicted air emissions are above de minimis levels for this proposal. Additional air quality concerns include the secondary impacts often associated with the demolition and construction of buildings. We encourage you to work with the Alabama Department of Environment Management (ADEM) to ensure consistency in your emissions estimates and the Alabama State Implementation Plan (SIP). EPA recommends that the project implement overall diesel emission reduction activities through various measures such as: switching to cleaner fuels, retrofitting current equipment with emission reduction technologies. exchanging older engines with newer cleaner engines, replacing older vehicles, and reducing idling through operator training and/or contracting policies. EPA can assist in the future development or implementation of these options. EPA would also be concern about Lead and Asbestos containing material located throughout the building proposed for demolition. The Asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP) contained in 40 C.F.R. Part 61, Subpart M would be applicable to the renovation and the demolition of these buildings. Among other requirements, the buildings would have to be thoroughly inspected for asbestos and the asbestos would have to be properly removed prior to demolition. If the buildings were simply abated, that would also have to be done in accordance with the applicable notification, work practice, and disposal requirements of the NESHAP if threshold amounts of asbestos were involved.
- * Noise The selected site should minimize noise impacts to any nearby residents during demolition.

- * NPDES National Pollutant Discharge Elimination System (NPDES) permit coverage for both project construction and operation are needed for point-source discharges. Although EPA retains oversight for the delegated NPDES Program, contact Alabama NPDES Stormwater for your permitting requirements for this project.
- * Ground-Water Quality In addition to waters of the United States and NPDES issues, there may be additional water quality concerns for the proposal that relates to the groundwater. Also, consider investigating if the use of Underground Storage Tanks (UST) that were used to store heating oil on site, if so, these tanks will have to be removed prior to construction and any groundwater or soil contamination remediated. If there are any monitoring well-heads within the proposed demolition sites, they should be protected from damage during demolition. If monitoring wells are no longer necessary, properly closed them to prevent ground water contamination.
- * Cultural Resources Coordinate with the Alabama State Historic Preservation Office (SHPO) to implement measures to avoid, minimize, or mitigate any adverse effect of Impacts to any historic and archaeological resources in the areas.
- * Cumulative Impacts The EA should also consider the cumulative impacts of the proposed project, particularly for those impacts generated by the project (e.g., noise and air quality). That is, the EA should discuss all (federal and non-federal) past, present, proposed and future (foreseeable within some 10-15 yrs) projects that are within the designated project area or affect that area (e.g., air/water). Such project areas are often designated by logical geographic boundaries such as watersheds, or by other methods. The cumulative impact analysis can be important for even small projects if their proposed location is in an area that is already extensively developed.
- * Recycling Consider an aggressive recycling program for the buildings planned for demolitions. Divert as much material from the landfill as possible.

Again, Thank you for the opportunity to provide comments to your proposed project, Please provide this office a copy of the Draft EA. If you have any question, feel free to contact me via the information provided below.

Larry O. Gissentanna
DoD and Federal Agency, Project Manager
NEPA Program Office
U.S. Environmental Protection Agency/ Region 4
61 Forsyth Street, SW
Atlanta, GA 30303-8960
Office: 404-562-8248
gissentanna.larry@epa.gov

JONES, JEFFREY L CTR USAF AETC 42 CES/CEV

From: Brenda King [bking@montgomerychamber.com]

Sent: Thursday, January 17, 2013 1:48 PM

To: JONES, JEFFREY L CTR USAF AETC 42 CES/CEV

Subject: Proposed Demolition & Consolidation Plan

Attachments: image001.jpg; image002.jpg; image003.jpg; image004.jpg; image005.jpg; image006.jpg;

image007 jpg; image008 jpg

Mr. Jones -

Joe Greene received a letter from you, dated Dec 21, subject: Proposed Demolition and Consolidation Plan - he has no comments or concerns on this proposal. Thanks for giving him a chance to look at it.

Description: Description: Description: MCC

Brenda King

Manager, Military & Governmental Affairs Montgomery Area Chamber of Commerce

www.montgomerychamber.com <http://www.montgomerychamber.com/>

600 S. Court Street

Montgomery Alabama 36101 Office: 334-230-8361

Description: Description: New Twitter https://twitter.com/MGMChamber Description: Description: Description: Description:

Description: LinkedIn http://www.linkedin.com/company/montgomery-area-chamber-of-commerce
Description: Description: Google+ https://plus.google.com/116488899950480608169/posts
Description: Description: Pinterest http://pinterest.com/mgmchamber/
Description: YouTube https://www.youtube.com/user/montgomerychamber?feature=results main>

Description: Description: Description: MCC

OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

From: JONES, JEFFREY L CTR USAF AETC 42 CES/CEV

Sent: Thursday, January 17, 2013 1:50 PM

To: OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

Subject: FW: Proposed Demolition & Consolidation Plan

Attachments: image001.jpg; image002.jpg; image003.jpg; image004.jpg; image005.jpg; image006.jpg;

image007.jpg; image008.jpg

Signed By: jeffrey.jones.42.ctr@us.af.mil

Beth,

Response for the file.

Jeff

----Original Message-----

From: Brenda King [mailto:bking@montgomerychamber.com]

Sent: Thursday, January 17, 2013 1:48 PM
To: JONES, JEFFREY L CTR USAF AETC 42 CES/CEV
Subject: Proposed Demolition & Consolidation Plan

Mr. Jones -

Joe Greene received a letter from you, dated Dec 21, subject: Proposed Demolition and Consolidation Plan - he has no comments or concerns on this proposal . Thanks for giving him a chance to look at it.

Description: Description: Description: MCC

Brenda King

Manager, Military & Governmental Affairs Montgomery Area Chamber of Commerce

www.montgomerychamber.com <http://www.montgomerychamber.com/>

600 S. Court Street Montgomery Alabama 36101 Office: 334-230-8361

Description: Description: New Twitter https://twitter.com/MGMChamber

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https://www.facebook.com/montgomery.chamber> Description: Description:

LinkedIn

http://www.linkedin.com/company/montgomery-area-chamber-of-commerce

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https://plus.google.com/116488899950480608169/posts Description: Description:

Description: YouTube

ELTON N. DEAN, SR. CHAIRMAN

DANIEL HARRIS, JR. VICE CHAIRMAN

REED INGRAM DIMITRI POLIZOS JILES WILLIAMS, JR. A COUNTY OLDER THAN THE STATE



ESTABLISHED 1816

DONALD L. MIMS, CPA, MPA ADMINISTRATOR JOHN A. MITCHELL, SR. DEPUTY ADMINISTRATOR (334) 832-1210 FAX (334) 832-2533 TDD (334) 265-3568 www.mc-ala.org

January 10, 2013

Mr. Jeff Jones, ESH Manager ITT Exelis Mission Systems Maxwell Base Operating Services 400 Cannon Street Maxwell AFB, Alabama 36112

Dear Mr. Jones:

I received you letter dated December 21, 2012, regarding Proposed Demolition and Consolidation Plan for Maxwell Air Force Base, Alabama. Your letter states "...we are requesting any comments or concerns you may have with the proposed project. In order to properly evaluate cumulative impacts, we are also requesting that you identify any major projects ... that are in the vicinity of the Proposed Action...".

I appreciate you informing us of this matter but since the Montgomery County Commission has not authority relative to this issue, you may consider sending this request to the City of Montgomery.

Sincerely,

Elton N. Dean, Sr.

Chairman

ENDSr/DLM/tn

OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

From:

JONES, JEFFREY L CTR USAF AETC 42 CES/CEV

Sent:

Friday, January 11, 2013 12:08 PM

To:

OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

Subject:

FW: Demolition and Consolidation Plan

Attachments: Signed By:

image003.jpg; ARARS_Land.xlsx jeffrey.jones.42.ctr@us.af.mil

FYI

----Original Message----

From: Joiner, Timothy I [mailto:tijoiner@adem.state.al.us]

Sent: Friday, January 11, 2013 11:32 AM

To: JONES, JEFFREY L CTR USAF AETC 42 CES/CEV Cc: Davis, Phil; Cobb, Steve; Wilson, J Jason Subject: Demolition and Consolodation Plan

Mr. Jones,

Per your letter to the Alabama Department of Environmental Management, dated December 21, 2012 requesting any comments or concerns we may have regarding the proposed "Demolition and Consolidation Plan" I have attached a table which is used internally as a quick reference to potentially Applicable or Relevant and Appropriate Requirements (ARARs) and State guidance documents. Due to the general nature of this request, and based on our phone conversation earlier this morning, this table should be sufficient to identify potentially applicable regulations. As the proposed projects develop, the Department will be able to provide more specific guidance. If you have any questions regarding the correspondence, please contact me using the information provided below.

Sincerely,

Timothy I. Joiner

Environmental Engineering Specialist

Alabama Department of Environmental Management

Land Division

Governmental Hazardous Waste Branch

Facilities Engineering Section

1400 Coliseum Boulevard

Montgomery, AL 36110-2059

Mailing Address: PO Box 301463, MGM, AL 36130-1463

Phone: 334-270-5610 Fax: 334-279-3050

Email: tijoiner@adem.state.al.us <mailto:jmbarnes@adem.state.al.us>

1x0logo

This message is confidential. It may also be privileged or otherwise protected by work product immunity or other legal rules. If you have received it by mistake, please let us know by e-mail reply and delete it from your system; you may not copy this message or disclose its contents to anyone.

Alabama Department of Environmental Management ARARs Table

revised 1/24/11

Division	(Prerequisite) If the selected remedy will involve* :	Chapter*	Title(Description)*	Applicable to Selected Remedy
Division 1 - General Administration	Fee determinations (permit/application) or Petitions to Declaratory Rulings	None	NA CONTRACTOR OF THE PROPERTY	
Division 2 - Environmental Management Commission	Petitions for Rulemaking or Appeals of Administrative Actions	None	NA .	
Division 3 -Air Pollution Control	Potential Impacts to Air Quality	ADEM 335-3-103	Ambient Air Quality Standards	
	Open Burning of Material	ADEM 335-3-301	Open Burning	
	On-site Incineration	ADEM 335-3-302	Incinerators	
	Incineration of Industrial Waste	ADEM 335-3-303	Incineration of Commercial and Industrial Solid Waste	
	Particulate Emissions	ADEM 335-3-401	Visible Emissions	
	Dust	ADEM 335-3-402	Fugitive Dust and Fugitive Emissions	
	Particulate Emissions	ADEM 335-3-403	Fuel Burning Equipment	
	Particulate Emissions	ADEM 335-3-404	Process Industries - General	
	Sulfur Dioxide Emissions	ADEM 335-3-501	Fuel Combustion	
	Separation of VOCs from Water	ADEM 335-3-602 and ADEM 335-3-625	VOC Water Separation	
	Storing VOCs	ADEM 335-3-603 and ADEM 335-3-626	Loading and Storage of VOCs	
	Potential Impacts to Air Quality	ADEM 335-3-10	Standards of Performance for New Stationary Sources	
	Hazardous Air Pollutants	ADEM 335-3-11	National Emission Standards for Hazardous Air Pollutants	
	Potential Impacts to Air Quality	ADEM 335-3-1403	Standards for Granting Permits	
	Potential Impacts to Air Quality	ADEM 335-3-1404	Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration (PSD)]	
	Potential Impacts to Air Quality	ADEM 335-3-1405	Air Permits Authorizing Construction In or Near Non-Attainment Areas	
	Hazardous Air Pollutants	ADEM 335-3-1406	Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Section 112(g)	
Division 4 - Scrap Tire Program	Remediation of a Site with Scrap Tires or material remaining from the accumulation, burning, or processing of scrap tires and other materials.	ADEM 335-4-201	Remediation of Sites	
	Transporting or Processing of Scrap Tires	ADEM 335-4-3	Registration and Permitting Requirements	

Division	(Prerequisite) If the selected remedy will involve* :	Chapter*	Title(Description)*	Applicable to Selected Remedy
	Transporting or Processing of Scrap Tires	ADEM 335-4-4	Management of Tire Materials	
	Accumulation of Scrap Tires	ADEM 335-4-4	Management of Tire Materials	
	Engineered Uses of Processed Tire Material	ADEM 335-4-4	Management of Tire Materials	
	Remediation of a Site with Scrap Tires	ADEM 335-4-4	Management of Tire Materials	
	Disposal of Tire Material in a SWDF	ADEM 335-4-4	Management of Tire Materials	
	Processing of Scrap Tires	ADEM 335-4-6	Scrap Tires Processors	
	Transporting or Processing of Scrap Tires	ADEM 335-4-7	Scrap Tire Transporter Requirements	
Division 5 - Uniform Environmental Covenants Program	The Site not being Remediated to Unrestricted Use per ADEM 335-5-103(r)	ADEM-335-5	Uniform Environmental Covenants Program	
Division 6-Volume 1 - Water Quality Program (NPDES)	Activities that Produce a Non-Domestic Wastewater Discharge into a POTW or Water of the State	ADEM 335-6-5	Indirect Discharge Permit and Pre- Treatment Rules	
	Activities resulting in a Potential Discharge of Pollutants into Waters of the State (this includes storm water)	ADEM 335-6-6	National Pollutant Discharge Elimination System (NPDES)	
	Activities resulting in a Potential Discharge of Pollutants into Waters of the State (this includes storm water)	ADEM 335-6-7	National Pollutant Discharge Elimination System (NPDES) BMPs, Requirements, and applicable Standards	
	Land Application of Waste or Wastewaters	ADEM 335-6-7	National Pollutant Discharge Elimination System (NPDES) BMPs, Requirements, and applicable Standards	
	The Evaluation and/or Remediation of Groundwater	ADEM 335-6-8.03	Underground Sources of Drinking Water	
	Groundwater Remediation	ADEM 335-6-8	Ground Water - and - Underground Injection Control	
(i tr T G C V V R Ir	The Use of Underground Injection (including the use of UI for in-situ treatment)	ADEM 335-6-8	Ground Water - and - Underground Injection Control	
	The Evaluation and/or Remediation of Groundwater	ADEM 335-6-10	Water Quality Criteria	
	Classification of Water Use	ADEM 335-6-10	Water Quality Criteria	
	Waste Treatment and Discharges	ADEM 335-6-10	Water Quality Criteria	
	Remediation of Surface Water or Impacting Surface Water during other Remedial Activities	ADEM 335-6-10	Water Quality Criteria	
	Classifying the Use of Interstate and Intrastate Waters	ADEM 335-6-11	Water Use Classification for Interstate and Intrastate Waters	

Division	(Prerequisite) If the selected remedy	Chapter*	Title(Description)*	Applicable to Selected
	will involve* :			Remedy
	Land Disturbance Activities near	ADEM 335-6-12	(NPDES) Construction, Noncoal/Nonmetallic	
	Surface Water Resources & the		Mining and Dry Processing less than Five	
	Management of Storm waters		Acres, Other Land Disturbance Activities,	
			and Areas Associated with these Activities	
Division 6-Volume 2 - Water Quality		ADEM 335-6-15	Technical Standards, Corrective Action	
Program (UST)	Remediation or the Operation of a UST		Requirements and Financial Responsibility	****
	or the area surrounding and near to a		for Owners and Operators of Underground	
	UST		Storage Tanks	
Division 7 - Water Supply Program	Evaluation and/or Remediation of	ADEM-335-7-2	Primary Drinking Water Standards	
	Surface Water or Ground Water that is			
	Considered a Potential Drinking Water			
	Source according to ADEM 335-6-11-			
	.02 (surface water) and ADEM 335-6-8-			
	.03 (groundwater)			,
Division 8 - Coastal Area	Activities in Coastal Areas	ADEM-335-8-1	General Provisions and Review Process	
Management Program		1		
	Activities in Coastal Areas	ADEM-335-8-2	Provisions Related to Costal Activities	
Division 9 - Water Well Standards	Installing Groundwater Wells	ADEM-335-9-1	Licensing and Certification of Water and	
Program	_		Water Well Construction Standards	
Division 10 - Water Division	Public Water and Wastewater	ADEM-335-10-1	Classification of Water and Wastewater	
Operator Certification Program	Treatment Plants		Drinking Plants, Water Distribution Systems,	
			and Public Wastewater Collection System;	
			Certification of Operators	
Division 11 - State Revolving Fund	Participation in the State Revolving	ADEM-335-11-1	Clean Water State Revolving Fund Program	
(SRF) Programs	Fund Program for Water, Wastewater			****
	and Green Infrastructure Projects			
Division 13 - Solid Waste Program	Management of Solid Waste	ADEM-335-13-1	General Provisions	
	Collection and Transportation of Solid	ADEM-335-13-2	Storage, Collection and Transportation	
	Waste			
	Processing or Recycling Solid Waste	ADEM-335-13-3	Processing and Recycling	
	Municipal Solid Waste Landfills	ADEM 335-13-4	Permit Requirements	
	Disposal of Solid Waste Into a Landfill	ADEM-335-13-5	Procedures for Obtaining Permits	
	Management of Solid Waste	ADEM-335-13-6	Inspection of Facilities	
	Treated or Untreated Medical Waste	ADEM-335-13-7	Medical Waste	
	Obtaining Variances	ADEM-335-13-8	Procedures for Variances	
	Solid Waste Management Plans	ADEM-335-13-9	State Solid Waste Management Plan	
	Recycling Grants	ADEM-335-13-10	Alabama Recycling Fund Grants Program	
	Unauthorized Solid Waste Dumps	ADEM-335-13-11	Solid Waste Fund Site Remediation	
	Operating a Public Solid Waste	ADEM-335-13-12	Landfill Operator Certification Requirements	
	Management Facility	ADEM 225 42 42	Ct-tit- C-E-t-W- t- D- t- t' - C- t	
****	Management of Solid Waste	ADEM-335-13-13	Statewide Solid Waste Reduction Goal	

Division	(Prerequisite) If the selected remedy will involve*:	Chapter*	Title(Description)*	Applicable to Selected Remedy
Division 14 - Hazardous Waste	Management of Hazardous Waste	ADEM-335-14-1	Hazardous Waste Management System:	
Program	3		General	
	Management of Hazardous Waste	ADEM-335-14-2	Identification and Listing of Hazardous	
	ľ		Waste	
	Generating Hazardous Waste, Solid	ADEM-335-14-3	Standards Applicable to Generators of	
	Waste and/or Other Waste		Hazardous Waste	
	Transporting Hazardous Waste	ADEM-335-14-4	Standards Applicable to Transporters of	
			Hazardous Waste	
	Treating, Storing, or Disposing of	ADEM-335-14-5	Standards for Owners and Operators of	
	Hazardous Waste		Hazardous Waste Treatment, Storage and	
			Disposal Facilities	
	Treating, Storing, or Disposing of	ADEM-335-14-6	Interim Status Standards for Owners and	
	Hazardous Waste Under Interim Status		Operators of Hazardous Waste Treatment,	
			Storage and Disposal Facilities	
	Recycling or Handling Specific Types of	ADEM-335-14-7	Standards for the Management of Specific	
	Hazardous Waste		Hazardous Wastes and Specific	<u> </u>
			Types of Hazardous Waste Management	
			Facilities	
	Transporting, Treating, Storing or	ADEM-335-14-8	Permit Program	
	Disposing of Hazardous Waste			
	Land Disposal of Hazardous Wastes	ADEM-335-14-9	Land Disposal Restrictions	
	Disposal of Universal Waste (Batteries,	ADEM-335-14-11	Standards for Universal Waste Management	
	Pesticides, Mercury Containing			[
	Equipment, Lamps)			
	Used Oil	ADEM-335-14-17	Standards for the Management of Used Oil	
Division 15 -Brownfield	Brownfields or VCP activities	ADEM-335-15-1	General	
Development and Voluntary				<u>.</u>
Cleanup Program (VCP)				
****	Brownfields or VCP activities	ADEM-335-15-2	Eligibility	
***************************************	Brownfields or VCP activities	ADEM-335-15-3	Application	
***************************************	Voluntary Property Assessment Plans	ADEM-335-15-4	Technical Information	
	Brownfields or VCP activities	ADEM-335-15-5	Financial Assurance	
	Brownfields or VCP activities, or	ADEM-335-15-6	Public Participation	
	contamination left in place	ADEM-335-15-7	Alahama Land Raggaling Payahing Lang	
	SRF funding for Site Remediation	WDCIAL-399-19-1	Alabama Land Recycling Revolving Loan	
Division 46 Development To 14		ADEM 225 40 4	Fund	
Division 16 - Drycleaning Trust Fund Program	Cleanup of Drycleaner sites	ADEM-335-16-1	General	
	Cleanup of Drycleaner sites	ADEM-335-16-2	Participation in the Alabama Dry Cleaning	
			Environmental Response Trust Fund Act (ADERTFA)	
	Drycleaner Generators of Hazardous	ADEM-335-16-3	Generator Requirements	
	and/or Other Wastes	ASEMPOSO-10-0	Contrator requirements	

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Division	(Prerequisite) If the selected remedy will involve* :	Chapter*	Title(Description)*	Applicable to Selected Remedy
	Initial Investigation of Drycleaner Site Cleanup of Drycleaner sites Cleanup of Drycleaner sites Cleanup of Drycleaner sites	ADEM-335-16-4 ADEM-335-16-5 ADEM-335-16-6 ADEM-335-16-7	Site Tracking and Prioritization Operating Standards Technical Information Cleanup Inventory List	
TO BE CONSIDERED	Alabama Environmental Investigation and Remediation Guidance (AEIRG) Document	www.adem.state.al.us/programs/land/guidance Reports.cnt	Statewide cross-programmatic guidance prepared to assist individuals in understanding and achieving the necessary elements of environmental investigations	
	Alabama Risk Based Corrective Action Guidance (ARBCA) Document	www.adem.state.al.us/p rograms/land/guidance Reports.cnt	Guidelines for a uniform statewaide cross- programmatic approach for the assessment of cumulative risk at a contaminated site and the development and selection of appropriate risk-based target levels.	

^{*} Some of the information contained in the Prerequisite, Chapter, and/or Title columns in this table may imply that the referenced Chapter of the ADEM Regulations only applies to activities where a Permit exists or is required. However, in most cases the information provided as part of a permit application is necessary to demonstrate that appropriate technical requirements have been met. Therefore, these Regulations should be included as ARARS where appropriate to satisfy any applicable technical requirements.



STATE OF ALABAMA

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES WILDLIFE AND FRESHWATER FISHERIES DIVISION



64 North Union Street, Ste. 567
P. O. Box 301456
Montgomery, AL 36130-1456
Phone: (334) 242-3465 Fax: (334) 242-3032
www.outdooralabama.com

ROBERT BENTLEY
GOVERNOR

N, GUNTER GUY, JR. COMMISSIONER

CURTIS JONES
DEPUTY COMMISSIONER

The mission of the Wildlife and Freshwater Fisheries Division is to manage, protect, conserve, and enhance the wildlife and aquatic resources of Alabama for the sustainable benefit of the people of Alabama.

CHARLES F. "CHUCK" SYKES DIRECTOR

> FRED R. HARDERS ASST. DIRECTOR

January 9, 2013

Mr. Jeff Jones Environmental Manager ITT Exelis Mission Systems 42 CES/CEV 400 Cannon Street Maxwell AFB, AL 36112

Re: Proposed Demolition and Consolidation Plan

Maxwell Air Force Base, Alabama

Dear Mr. Jones:

The Division of Wildlife and Freshwater Fisheries (DWFF), Department of Conservation and Natural Resources has no objection to the proposed action to demolish and consolidate certain facilities at Maxwell AFB, Alabama. The proposed project is unlikely to adversely affect any public trust resources of the DWFF.

We appreciate the opportunity to comment on this project.

Sincerely.

Matthew D. Marshall
Environmental Coordinator

NOT THE STATE OF T

United States Department of the Interior

FISH AND WILDLIFE SERVICE 1208-B Main Street Daphne, Alabama 36526

IN REPLY REFER TO: 2013-TA-0163

JAN 0 9 2013

Mr. Jeff Jones Environmental Manager, ITT Exelis Mission Systems 400 Cannon Street Maxwell AFB, AL 36112

Dear Mr. Jones:

Thank you for your letter dated December 21, 2012, requesting comments on the demolition and transfer of existing facilities on Gunter Annex and Maxwell AFB, Alabama. We have reviewed the information and are providing the following comments in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et.).

The U.S. Fish and Wildlife Service (Service) believes no adverse affect to listed species or critical habitat will occur as a result of this activity. However, obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect endangered or threatened species or critical habitat in a manner not previously considered, (2) this action is subsequently modified in a manner not considered in this review, or (3) a new species is listed or critical habitat is determined that may be affected by the action.

If you need additional information with regards to this correspondence, please contact Mr. Bruce Porter at (251) 441-5864 or email bruce_porter@fws.gov.

Sincerely,

Dan Everson

Deputy Field Supervisor

Alabama Ecological Services Field Office

FAX: 251-441-6222

Al Abama Department of Economic and Community Affairs JIM Byard, Jr. Director





December 27, 2012

Jeff Jones, CSP, CHMM, CHST ESH Manager ITT Exelis Mission Systems 42 CES/CEV 400 Cannon Street Maxwell AFB, AL 36112

Dear Mr. Jones,

We have reviewed the documents you sent regarding the Proposed Demolition and Consolidation Plan, Maxwell AFB, Alabama. We do not have any questions or comments and we appreciate the opportunity to review this project.

If we may be of any assistance, please let us know.

Sincerely,

J. Brian Atkins, P.E. Division Director

Alabama Office of Water Resources

Gran athins

OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

From:

JONES, JEFFREY L CTR USAF AETC 42 CES/CEV

Sent:

Tuesday, April 02, 2013 3:42 PM

To:

OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

Subject:

FW: Demo Scoping letter (UNCLASSIFIED)

Signed By:

jeffrey.jones.42.ctr@us.af.mil

FYI

----Original Message----

From: ARNOLD, GARY B CTR USAF AETC 42 CES/DM

Sent: Tuesday, April 02, 2013 1:10 PM

To: JONES, JEFFREY L CTR USAF AETC 42 CES/CEV

Cc: 42 MSG/PM Org Mailbox

Subject: FW: Demo Scoping letter (UNCLASSIFIED)

Jeff,

FYI on the scoping letter from the COE.

Also note the different address he says to send these type of things to for future.

Bruce

Gary B. "Bruce" Arnold, CAPM Civil Engineer Manager (BOS Contractor) ITT Exelis, Mission Systems Division 400 Cannon Street, Bldg 1060 Maxwell AFB, AL 36112 Phone: 953-3944 (DSN 493-3944)

Cell: 334-558-5296

gary.arnold.4.ctr@us.af.mil

----Original Message----

From: Cherry, James S SAM [mailto:James.S.Cherry@usace.army.mil]

Sent: Tuesday, April 02, 2013 1:00 PM

To: ARNOLD, GARY B CTR USAF AETC 42 CES/DM

Cc: House-Pearson, Cindy J SAM

Subject: RE: Demo Scoping letter (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Bruce-

Thanks for your quick response. As I indicated on the phone, our only concern

with this type of demolition project would be the debris disposal. Be sure that the contractor understands that debris cannot be placed into a water of

the U.S., including wetlands, without first obtasining a CWA Section 404 permit. There have been issues with this in the past. Per your request I

close this action, and look forward to working with you in the future. To save

time and effort please forward all upcoming projects to the following address.

U. S. Army Corps of Engineers
Regulatory Division/ Birmingham Field Office
222 Summit Parkway
Homewood, AL 35209

James S. Cherry, II
Biologist
U.S. Army Corps of Engineers
Mobile District, Regulatory Division
Montgomery Field Office
605 Maple Street
Bldg 1429, Room 105
Maxwell AFB, AL 36112

205-290-9096 (Phone)

Customer Survey: http://per2.nwp.usace.army.mil/survey.html

----Original Message----

From: ARNOLD, GARY B CTR USAF AETC 42 CES/DM

[mailto:gary.arnold.4.ctr@us.af.mil]
Sent: Monday, April 01, 2013 4:05 PM

To: Cherry, James S SAM

Subject: FW: Demo Scoping letter

Mr Cherry,

Attached is the scoping letter that went out one the demo consolidation plan. The original was mailed out, but this gives you the information. Let me know if you need to see anything more.

Bruce

Gary B. "Bruce" Arnold, CAPM
Civil Engineer Manager (BOS Contractor)
ITT Exelis, Mission Systems Division
400 Cannon Street, Bldg 1060
Maxwell AFB, AL 36112
Phone: 953-3944 (DSN 493-3944)
Cell: 334-558-5296

----Original Message----

gary.arnold.4.ctr@us.af.mil

From: JONES, JEFFREY L CTR USAF AETC 42 CES/CEV

Sent: Monday, April 01, 2013 4:01 PM

To: ARNOLD, GARY B CTR USAF AETC 42 CES/DM

Subject: Demo Scoping letter

Bruce,

Attached is the addressed scoping letter sent out for the DEMO EA. It is not the signed letter or on letter head since these were mailed hard copy.

This will give them the meat and potatoes of what was sent out. This is not an complete official correspondence package.

Hope this helps,

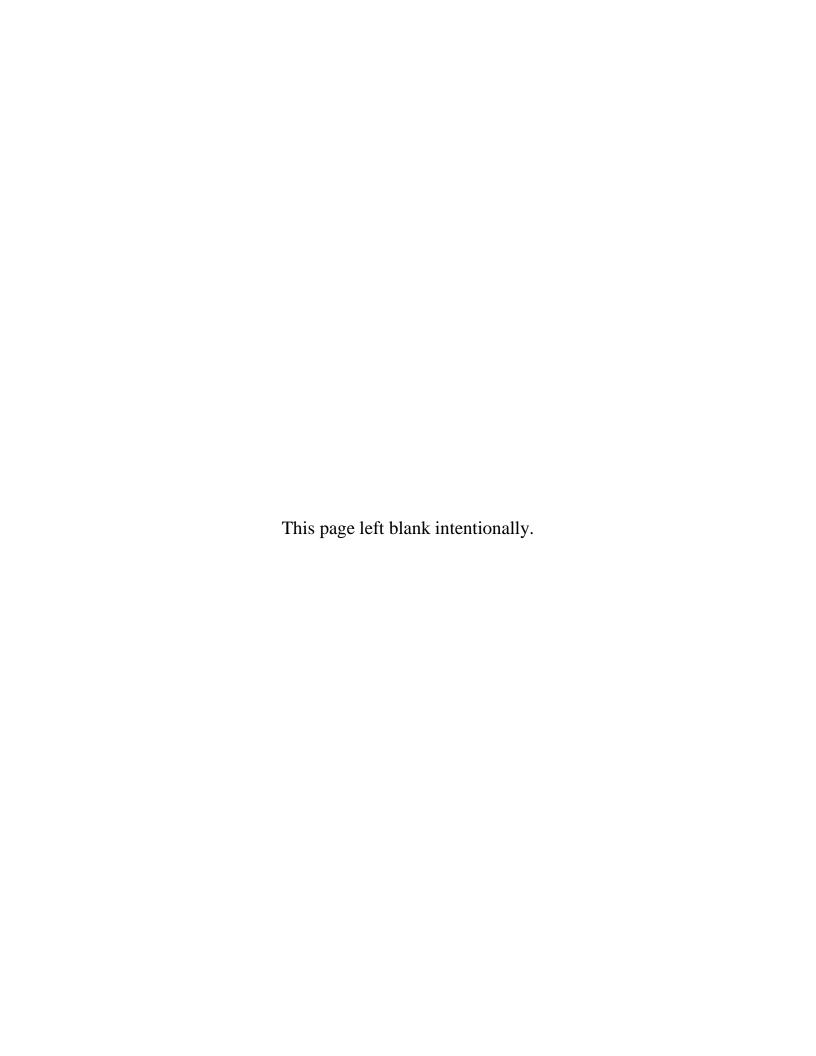
Jeff Jones, CSP,CHMM,CHST ESH Manager 42 CES/CEV-BOS Contractor ITT Exelis, Mission Systems 400 Cannon Street Maxwell Air Force Base, Alabama Office 334-953-5757 Cell 334-782-7883 Fax 334-953-4333 DSN 493-5757

Classification: UNCLASSIFIED

Caveats: NONE

APPENDIX B

STATE HISTORIC PRESERVATION OFFICE COORDINATION





468 SOUTH PERRY STREET MONTGOMERY, ALABAMA 36130-0900

FRANK W. WHITE **EXECUTIVE DIRECTOR** TEL: 334-242-3184 FAX: 334-240-3477

February 13, 2013

Lindsay Kennington Cultural Resource Manager 42 CES/CEV 400 Cannon Street, Building 1060 Maxwell AFB, Alabama 36112

Re: AHC 12-0850

Maxwell AFB Comments

Demolition Plan

Montgomery County, Alabama

Dear Ms. Kennington:

Upon review of your response to our comments regard the demolition plan at Maxwell Air Force Base, we agree that the base theatre is eligible for the National Register of Historic Furthermore we appreciate your office's offer to record the structure prior to demolition. Finally, we make every effort to respond in a timely manner to every project we receive and if we were remiss on this project, we apologize. In an effort to ensure this does not occur again, our responses will be submitted to your office via e-mail at carrie.kennington.ctr@us.af.mil and our e-mail will include an automated reply to our office that you have received the letter.

Should you have any questions, please contact Greg Rhinehart at (334) 230-2662 or by e-mail at greg.rhinehart@preserveala.org. Please have the AHC tracking number referenced above available and include it with any correspondence.

Truly yours,

Elizabeth Ann Brown

Lliealuth Ann Bronz

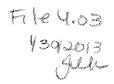
Deputy State Historic Preservation Officer

EAB/SGH/GCR/gcr



DEPARTMENT OF THE AIR FORCE

42D AIR BASE WING (AETC) MAXWELL AIR FORCE BASE ALABAMA



30 January 2013

Ms Elizabeth Brown Alabama Deputy State Historic Preservation Officer Alabama Historical Commission 468 South Perry Street Montgomery, Al 36130-0900

Dear Ms. Brown: Elizabeth

Thank you for your response to the scoping letter for the Demolition and Consolidation EA being prepared at Maxwell AFB. Given the below listed sequence of events, I am confused by the response you provided to the scoping letter sent 26 December 2012. We have fulfilled our Section 106 obligations regarding the demolition and consolidation of facilities provided. We did not receive any correspondence within the allotted 30 days. We notified your office of our intent to demolish without further mitigation on 27 Nov 2012.

Even though we have met the Section 106 consultation requirements as referenced above, we agree that building 26 (Base Theater) is likely eligible for inclusion on the National Register of Historic Places. Therefore, in a good faith effort, we would like to propose to document the facility with a Level 1 Historic American Building Survey. No further mitigation will be accomplished for any of the other facilities listed.

According to my records, a request for Section 106 consultation regarding the demo/consolidation was hand delivered on 10/9/12 (AHC-12-0850). We did not receive a letter regarding the proposed demolition plan within 30 days. A request for Section 106 consultation regarding the demolition of building 26 (Base Theater) was hand delivered on 8/29/12. An email requesting a status update on the proposed demolition was sent to Greg Rhinehart on 10/23/12. We did not receive a letter or further correspondence regarding the demolition of building 26 within 30 days. Attached are several documents referencing the Section 106 consultation completed for this proposed action to include copies of our correspondence and the above mentioned emails.

We did receive a letter dated 6 November with comments. This letter was post marked 16 November 2012 and was not received in our office until 27 November 2012. On 19 November, we notified your office that we had not received any correspondence and would be proceeding with demolition of the facilities to include building 26, the Base Theater without further mitigation. This email correspondence is also attached. We hand delivered a formal letter detailing this same information on 27 November 2012. I spoke with Greg Rhinehart to confirm that our letter had been received on 3 December 2012. We have received no further correspondence from your office.

According to our earlier conversations and correspondence as well as the "Inventory and Assessment" done by a 3rd party contractor, building 26 (Base Theater) is likely eligible for inclusion on the National Register of Historic Places. Although the theater retains a high level of architectural integrity, it would require substantial renovations and upgrades in order to be usable. The Air Force does not have the funds to pay for the renovations necessary to restore or maintain the facility. It is not economically feasible to adaptively reuse the space due to the building's unique structure and layout. Maxwell AFB has decided to stop operations and demolish the facility due to the reduction in use, poor condition of the HVAC system, and inability to efficiently reuse the facility. We propose to document the facility with a Level 1 Historic American Building Survey.

Thank you for your response and consultation on this proposed action. If you have any questions or any additional information is needed, please contact me at 953-7155 or via email at carrie.kennington.ctr@us.af.mil.

Sincerely,

Lindsay Kennington

Cultural Resource Manager

Commission

42 CES/CEV

CLK Enclosures

STATE OF ALABAMA ALABAMA HISTORICAL COMMISSION

468 SOUTH PERRY STREET P.O. BOX 300900

MONTGOMERY, ALABAMA 36130-0900

JEFF JONES
ESH MANAGER ITT EXELIS MISSION
MAXWELL BASE OPERATING SERVICES
400 CANNON ST

MAXWELL AFB AL 36112

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STATE OF ALABAMA ALABAMA HISTORICAL COMMISSION

468 SOUTH PERRY STREET MONTGOMERY, ALABAMA 36130-0900

FRANK W. WHITE EXECUTIVE DIRECTOR

January 16, 2013

Land Carlotte State of the Carlotte State of

TEL: 334-242-3184 FAX: 334-240-3477

Jeff Jones
ESH Manager, ITT Exelis Mission Systems
Maxwell Base Operating Services
400 Cannon Street
Maxwell AFB, Alabama 36112

Re.

AHC 1240850

Proposed Demolition & Consolidation Plan

Maxwell Air Force Base Montgomery County, Alabama

Dear Mr. Jones:

Thank you for notification of the Environmental Assessment being prepared for Maxwell Air Force Base. We have been working with the base's Cultural Resource Manager (CRM) since March 2012 on the Maxwell/Gunter Demolition and Consolidation Plan.

We were presented with a list of 51 resources that are scheduled for demolition or transfer (41 demolitions and 10 transfers). In our May 2, 2012 letter to the CRM, we concurred with the demolition of fifteen (15) properties at Maxwell and Gunter due to loss of integrity. We also concurred with the transfer of ten (10) properties eligible for listing in the National Register of Historic Places (NRHP). The remaining 26 properties scheduled for demolition had not been evaluated by Maxwell's CRM or were deemed not eligible (and for which we did not have information of this assessment); therefore, we requested additional information. See Items 3 and 4 of the May 2, 2012 letter.

During the month of September 2012, additional information was provided on three of the 26 remaining properties, and we concurred with the demolition of two that were not NRHP-eligible and failed to respond to one that is NRHP-eligible. We received an updated *Inventory and Assessment of Select Buildings and Structures* (Dating through 1976) of Maxwell/Gunter in October 2012. We had various comments about this report, as stated in our November 6, 2012 letter to the CRM, and we are awaiting a response.

AHC 13-0332 Maxwell AFB Demolition & Consolidation Plan Page 2

To summarize the status of our review, out of 51 properties we are reviewing for the base Demolition and Consolidation plan, eighteen (18) are cleared for demolition and ten (10) are cleared for transfer with safeguards attached to the transfer. The remaining 23 may be addressed as soon as we receive additional information. We also note that the Disposal table provided in your December 21, 2012 letter lists 52 facilities (38 demolitions and 14 transfers), so we may need an updated list of each facility on this list to compare it to the resources we've reviewed to date. Finally, we look forward to reviewing the Environmental Assessment as soon as it is finalized.

We appreciate your continued efforts on this project. Should you have any questions, please contact Chloe Mercer at (334) 230-2669, Please have the AHC tracking number referenced above available and include it with any correspondence.

Truly yours,

Elizabeth Ann Brown

Elisabeth Ann Bronz

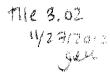
Deputy State Historic Preservation Officer

EAB/CM/GCR/gcr

December 3, 2012

Memo to File:

On this date, Lindsay Kennington spoke by telephone with Greg Rhinehart, of the Alabama Historical Commission. Rhinehart confirmed that the AHC received the letter from 42 CES/CEV, dated 27 November 2012. In this letter, we state that we will be proceeding with the proposed demolitions of buildings listed in "Maxwell Air Force Base: Inventory and Assessment of Select Buildings and Structures", without further mitigation.





DEPARTMENT OF THE AIR FORCE

42D AIR BASE WING (AETC)
MAXWELL AIR FORCE BASE ALABAMA

27 November 2012

Ms Elizabeth Brown Alabama Deputy State Historic Preservation Officer Alabama Historical Commission 468 South Perry Street Montgomery, Al 36130-0900

RE: AHC 12-0850

Maxwell AFB Demolitions Montgomery County, Alabama

Dear Ms, Brown: Elizabeth

Thank you very much for your assistance and consultation on the various proposed demolitions for Maxwell AFB. As discussed, via email attached, we will be proceeding with demolition of the buildings listed in the "Maxwell Air Force Base: Inventory and Assessment of Select Buildings and Structures" to include building 26, the base theatre, without further mitigation. We appreciate your efforts on this project.

Sincerely,

Lindsay Kennington

Cultural Resource Manager

42 CES/CEV

CLK Enclosures

STATE OF ALABAMA ALABAMA HISTORICAL COMMISSION

468 SOUTH PERRY STREET
P.O. BOX 300900
MONTGOMERY, ALABAMA 36130-0900



LINDSAY KENNINGTON
42 CES/CEV
400 CANNON ST BUILDING 1060
MAXWELL AFB AL 36112







STATE OF ALABAMA LABAMA HISTORICAL COMMISSION

468 SOUTH PERRY STREET
MONTGOMERY, ALABAMA 36130-0900

FRANK W. WHITE EXECUTIVE DIRECTOR

November 6, 2012

Tel: 334-242-3184 Fax: 334-240-3477

Lindsay Kennington
Cultural Resource Manager
42 CES/CEV
400 Cannon Street, Building 1060
Maxwell AFB, Alabama 361 2

Re:

AHC 12-0850

Maxwell AFB Demolitions
Montgomery County, Alabama

Dear Ms. Kennington:

Thank you for submitting additional information for 66 buildings located both at Maxwell Air Force Base and Gunter Annex. After reviewing the report entitled, "Maxwell Air Force Base: Inventory and Assessment of Select Buildings and Structures (Dating Through 1976), we have the following comments:

- Overall, this report was extremely difficult to navigate. Dividing the properties up by type (administration facilities, recreational facilities, etc.) is somewhat useful, but it is extremely time consuming when trying to find where specific building numbers are discussed in the report without an index (see next bullet point).
- Page A-3, Table A-1: Evaluated Resources at Maxwell AFB: provide the report page number(s) on which these buildings appear.
- Page iv: the report mentions that over 160 resources were initially identified on the real property, but a large number were eliminated from consideration for several reasons. For reason #1, provide a list of these resources along with their location, age, and historic use.
- Chapter 4, throughout: While it is helpful to have architectural descriptions of each surveyed resource, it would be equally helpful to individually discuss a building's integrity directly under each architectural description. We are aware that integrity was assessed for each building category, but that discussion lumped together all structures within that particular section.

AHC 12-0850 Maxwell AFB Demolitions Page 2

- Page 56: the report mentions that Ten WWII-era facilities maintain their geospatial relationship to one another, but were determined not eligible as a historic district due to integrity issues. We expected a section of the report to discuss this in more detail and have descriptions and photos of the ten buildings. However, they were all scattered within the report and were not adequately addressed.
- Photos for all 66 buildings were not included in the report.
- Please submit another copy of the CD of survey forms.

We appreciate your efforts on this project. Should you have any questions, please contact Greg Rhinehart at (334) 230-2662. Please have the AHC tracking number referenced above available and include it with any correspondence.

Truly yours,

Elizabeth Ann Brown

Elieaueth Ann Brom

Deputy State Historic Preservation Officer

EAB/GCR/gcr

to the state of th

KENNINGTON, CARRIEL CTR USAF AETC 42 CES/CEV

rom:

Brown, Elizabeth < Elizabeth.Brown@preserveala.org>

Sent:

Monday, November 19, 2012 9:55 AM

To:

KENNINGTON, CARRIE L CTR USAF AETC 42 CES/CEV

Cc:

Rhinehart, Gred

Subject:

RE: Clemolition/Consolidation Plan and Building 26 (Base Theatre) Demolition

I have no idea why we failed to respond. I will say, that when you hand deliver Section 106 correspondence, you need to put it on the mailbox shelf in the hall and not in my office, so that it is sure to be logged in.

----Original Message----

From: KENNINGTON, CARRIEL CTR USAF AETC 42 CES/CEV [mailto:carrie.kennington.ctr@us.af.mil]

Sent: Monday, November 19, 2012 8:55 AM

To: Rhinehart, Greg; Brown, Elizabeth; Mercer, Chloe, Hill, Amanda

Subject: Demolition/Consolidation Plan and Building 26 (Base Theatre) Demolition

Good Morning,

Thank you for your assistance in both the demolition/ consolidation plan and the proposed demolition of building 26. According to my records, request for Section 106 consultation regarding demo/consolidation was hand delivered on 10/9/12 (AHC-12-0850). We have not received a letter regarding the proposed demolition plan, therefore we are proceeding with demolition.

A request for Section 106 consultation regarding the demolition of building 26 (Base Theatre) was hand delivered on 8/29/12. An email requesting a status update on the proposed demolition was sent to Greg Rhinehart on 10/23/12. We have not received a letter or further correspondence regarding the demolition of building 26, therefore we are proceeding with demolition.

Again, thank you all so much for your assistance with these projects.

Happy Thanksgiving,

Lindsay Kennington

KENNINGTON, CARRIE L CTR USAF AETC 42 CES/CEV

From:	KENNINGTON, CARRIE L CTR USAF AETC 42 CES/CEV
Sent:	Tuesday, October 23, 2012 11:31 AM
To:	'greg rhinehart@preserveala.org'
Subject:	Mitigation for Demolition of Building 26
Greg,	
	pe) have discussed verbally the status of building 26. We have not gotten any written asures are necessary to mitigate the demolition of the theater. Can you provide some tatus please?
Thank you so much for you	help in this matter.
V/R,	
Lindsay	



DEPARTMENT OF THE AIR FORCE

42D AIR BASE WING (AETC)
MAXWELL AIR FORCE BASE ALABAMA

09 October 2012

Ms Elizabeth Brown Alabama Deputy State Historic Preservation Officer Alabama Historical Commission 468 South Perry Street Montgomery, Al 36130-0900

Elizabeth

Dear Ms. Brown:

RE: AHC 12-0850

Maxwell/Gunter Demolition Consolidation Plan

Dear Ms. Brown:

Your letter dated 2 May 2012 requested additional information to include NRHP evaluation of several of the facilities involved in the 20/20 Demolition Consolidation Plan. Attached please find the Inventory and Assessment of Select Buildings and Structures (Dating through 1976) as well as a CD copy of the draft report. This document found one facility to be eligible, building 26. All other facilities were found to be ineligible and many are scheduled for demolition. We request your concurrence with this determination.

Thank you for your assistance with this matter. If additional information is needed, please contact me at 953-5260.

Sincerely,

Yudoay Kennington
Lindsay Kennington

Cultural Resources Manager

42 CES/CEV

CLK Enclosures



DEPARTMENT OF THE AIR FORCE

42D AIR BASE WING (AETC)
MAXWELL AIR FORCE BASE ALABAMA

29 August 2012

Ms Elizabeth Brown Alabama Deputy State Historic Preservation Officer Alabama Historical Commission 468 South Perry Street Montgomery, Al 36130-0900

Clarification of Eligibility of building 26 (Base Theater) at Maxwell, AFB and proposed demolition

Dear Ms. Brown: Elizaboth

In accordance with Section 106 of the Historic Preservation Act, Maxwell AFB is requesting consultation on the proposed demolition of building 26, the Base Theater. Your letter (AHC12-0850), dated 2 May 2012, requested additional information regarding the status of the property and copies of reports regarding eligibility. According to the recent inventory and assessment of NRHP status, building 26 was recommended eligible. Attached please find an excerpt from our recent inventory and assessment, historic building survey form, and a justification letter for the proposed demolition and associated mitigation. We request your consultation and assistance in mitigation for this demolition.

Thank you for your assistance with this matter. If additional information is needed, please contact me at 953-5260.

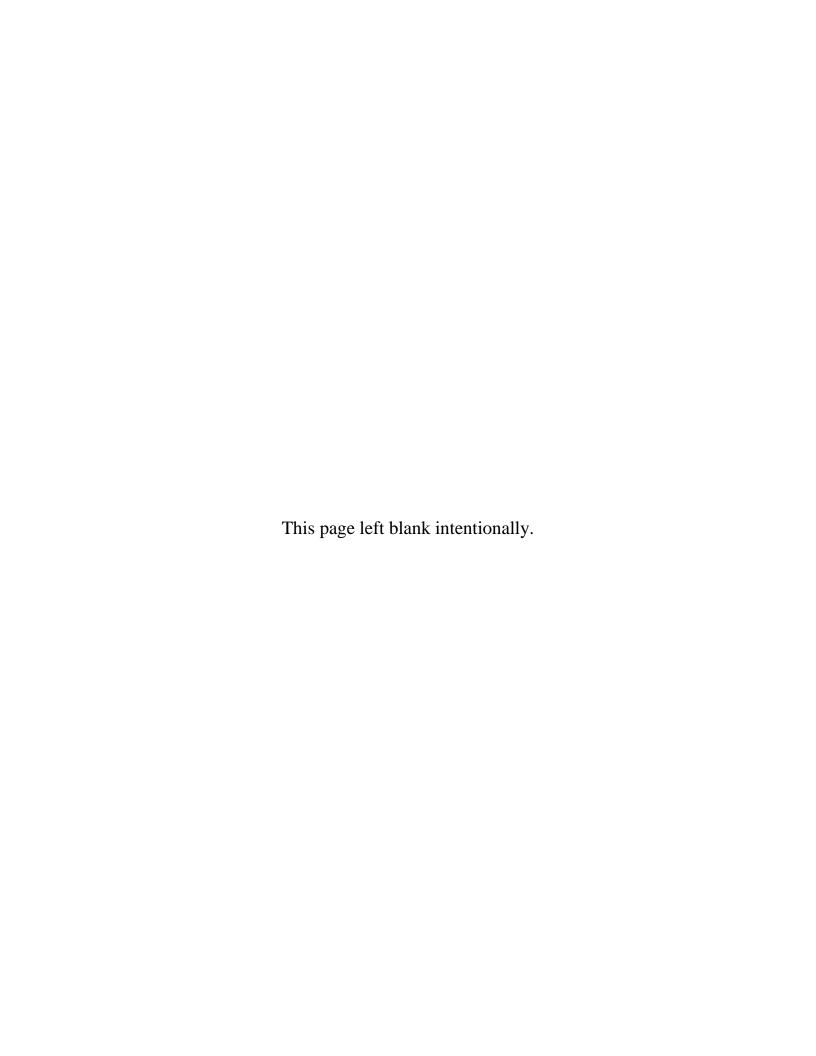
Sincerely,

Lindsay Kennington

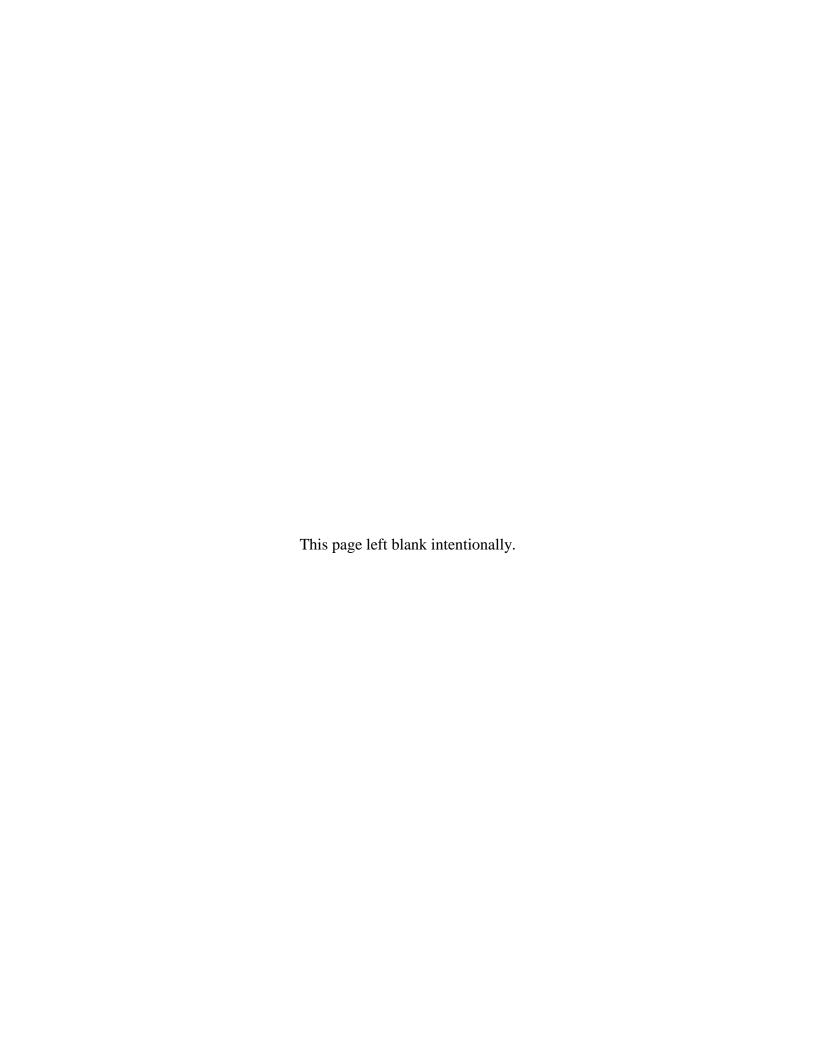
Cultural Resource Manager

42 CES/CEV

CLK Enclosures



APPENDIX C OTHER SUPPORTING DOCUMENTATION





DEPARTMENT OF THE AIR FORCE HEADQUARTERS UNITED STATES AIR FORCE WASHINGTON DC

FEB 14 2011

MEMORANDUM FOR ALMAJCOM-FOA-DRU/CC

FROM: HQ USAF/CV

1670 Air Force Pentagon Washington, DC 20330-1670

SUBJECT: Sustainable Installations and Air Force 20/20 by 2020

On 10 Jun 10, President Obama signed a memorandum to all federal agencies charging them to dispose of unneeded real estate, with a focus on utilizing installations more efficiently by optimizing facility-space use, reducing energy/water operating costs, and sustaining only those facilities needed to conduct the mission. In concert, AFPD 32-10 mandates an asset management approach to efficiently allocate our limited funds between valid competing needs.

We intend to meet the President's challenge by leveraging our existing Air Force initiative "20/20 by 2020," which aims to reduce owned, leased, and Air Force-led joint base real property and associated operating costs 20 percent by the year 2020. One pillar of this initiative involves consolidating our operations into the right-sized facilities and demolishing those that fail to meet space utilization criteria outlined in AFH 32-1084. To support this pillar and the President's direction, we are adopting an approach that favors investment in reuse of existing facilities for 'new mission' and 'realignment' over new construction. Effective in the FY13 program, all MILCON must conform to the goal of a net 20 percent reduction of real property across the Air Force portfolio. This approach will not only reduce sustainment investment, but will also reduce operational costs and help us achieve our energy/water conservation goals.

I have directed AF/A7C to provide integrated policy, guidance, and targets to assist MAJCOMs with facility optimization to include space utilization, energy/water conservation, and asset condition standards. Please give this matter your personal attention to ensure that these issues and concepts are understood and implemented across your organizations and installations. For additional information, please contact Colonel Stephen Wood, AF/A7CA at DSN 664-0650.

PHILIP M. BREEDLOVE

General, USAF Vice Chief of Staff

Attachment: POTUS Memorandum, 10 Jun 10

From: THOMPSON, B M JR GS-12 USAF AETC 42 CES/CEAN
To: OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

Subject: RE: Demo/Consolidation EA

Date: Wednesday, April 10, 2013 3:25:33 PM

Beth.

I have reviewed the list of bldgs for demolition. None of these will have any impact to our IRP sites. All the sites except SD-001 have to do with groundwater contamination issues, which would not be impacted by demolition activities.

I would add Gunter Site SS-005 to your Table 3-5 since it includes the area near the Print Plant (G847). I would also add Gunter IRP site SD-001 to your Table 3-5 since there is surface drainage near some of the bldgs to be demolished.

Hope this helps. Call me if you have any questions.

Merrill

-----Original Message-----

From: OSGOOD, BETH A CTR USAF AETC 42 CES/CEV

Sent: Wednesday, April 10, 2013 11:18 AM

To: THOMPSON, B M JR GS-12 USAF AETC 42 CES/CEAN

Subject: Demo/Consolidation EA

Merrill.

When you have a minute, could you please come see me or give me a call? I need to check with you about one section of the Demolition EA that I am compiling. Thanks.

Beth Osgood, Environmental Specialist ITT Exelis, Mission Systems Division 42 CES/CEV Maxwell Air Force Base, Alabama 334-953-6417 DSN: 493-6417 beth.osgood.ctr@maxwell.af.mil

Estimated Utility Impacts from Proposed Demolitions

Base	Facility Nbr	Quantity		DEMO FY	Status	Local Designation	Electrical (KWH)	Natural Gas (KCF)	Water (KGAL)	Total (MBTU)	KBTU/SF	Electrical (\$)	Natural Gas (\$)	Water (\$)	Total Cost	Electrical (\$/KWH)	Natural Gas (\$/KCF)	Water (\$/KGAL)
JUBJ	302			2013		FALCONS NEST	380,520.00	1,323.09	209.41	2,793.81	104.06	\$ 23,596.05		\$ 1,094.90	\$ 36,267.15	0.06201	8.749355	5.2286
JUBJ	307	1058.00		2013		STORAGE BLDG	14,995.72	52.14	8.25	110.10	104.06	\$ 929.88				0.06201		
JUBJ	322	13585.00		2013		AU PROF/TECH ED	159,240.00	669.51	42.90	1,300.03	95.70	\$ 9,874.47				0.06201	8.749355	
JUBJ	821		2.00	2014		HQ GROUP	191,248.17	494.90	7.80	1,211.96	120.69	\$ 11,859.30				0.06201	8.749355	
JUBJ	847			2017		PLT, PRINTING	303,000.00	83.20	50.70	1,128.16	54.57	\$ 18,789.03					8.749355	
JUBJ	850	10492.00		2018		GYMNASIUM	89,840.00	517.07	11.70	890.92	84.91	\$ 5,570.98				0.06201	8.749355	
JUBJ	900	27028.00	4.00 21.60	2019 2019		HQ AF	1,006,400.00 160,819.95	1,332.01 212.85	15.60 84.22	4,940.02	182.77	\$ 62,406.86 \$ 9,972.45				0.06201	8.749355	
JUBJ	904	4319.00 238.00	1.19	2019		SWIMMERS BATH HSE SAN LATRINE	8.862.04	11.73	4.64	789.40 43.50	182.77 182.77	\$ 9,972.45 \$ 549.54				0.06201	8.749355 8.749355	
JUBJ	910	12106.00	60.53	2019		WHSE SUP EQUIP BSE	4,592.00	596.62	236.07	689.85	56.98	\$ 284.75				0.06201		
JUBJ	1411	28831.00	96.10	TBD		DORM, VAQ	203,967.97	1,489.09	1,290.11	2,378.82	82.51	\$ 16,190.72				0.06201	8.749355	
JUBJ	1510	26012.00	61.00	2015		ADMIN OFC. NON-AF	1.137.600.00	467.80	237.90	4,411,24	169.58	\$ 70,542.58				0.06201		
JUBJ	1511	26266.00		2015		ADMIN OFC, NON-AF	174,664.00	418.00	214.50	1,068.47	40.68	\$ 10,830.91				0.06201		
JUBJ	1512	35459.00		2015		ADMIN OFC, NON-AF	659,840.00	787.90	253.50	3,142,36	88.62	\$ 40,916.68				0.06201	8.749355	
PNQS	1	27457.00	6.00	2020		DARGUE HALL	299,160.00	11.10	23.40	1.033.58	37.64	\$ 18,550.91				0.06201	8.749355	
PNQS	18			2018		REF	7,516.00	138.43	52.28	182.08	67.91	\$ 466.07				0.06201	8.749355	
PNQS	26	17837.00	89.19	2017		WEAVER THEATER	191,640.00	921.00	347.82	1,694.80	95.02	\$ 11,883.60	\$ 8,058.16	\$ 1,818.62	\$ 21,760.37	0.06201	8.749355	5.2286
PNQS	27	1494.00	7.47	2017		HTG FCLTY BLDG	16,051.48	77.14	29.13	141.95	95.02					0.06201		
PNQS	40	13361.00	24.00	2014		WHSE, FORM PUB BSE	266,760.00	473.30	93.60	1,445.28	108.17	\$ 16,541.79	\$ 4,141.07	\$ 489.40	\$ 21,172.25	0.06201	8.749355	5.2286
PNQS	677	10549.00	15.00	2019		FAM SPT CEN	834,600.00	544.69	58.50	3,463.99	328.37	\$ 51,753.55	\$ 4,765.68	\$ 305.87	\$ 56,825.10	0.06201	8.749355	5.2286
PQNS	695	27295.00	56.00	TBD		DORM, VAQ	3,966,073.44	1,409.76	218.40	15,129.24	554.29	\$ -	\$ -	\$ -	\$ -			
PQNS	699			TBD)	VOQ (O1-O10)	195,654.00	1,459.34	280.80	2,316.82	82.00	\$ -	\$ -	\$ -	\$ -			
PNQS	711	12457.00	28.00	2016		AU PROF/TECH ED	166,840.00	613.91	109.20	1,263.15	101.40	\$ 10,345.75				0.06201	8.749355	5.2286
PNQS	742	23905.00		2016		RECREATION CENTER	380,680.00	564.40	58.50	1,937.03	81.03	\$ 23,605.97				0.06201	8.749355	
PNQS	803	44747.00	52.00	2015		AU PROF/TECH ED	679,920.00	2,205.25	202.80	4,812.50	107.55	\$ 42,161.84					8.749355	
PNQS	853	5843.00		2013		ADMIN OFC, NON-AF	62,714.00	119.60	113.94	349.19	59.76	\$ 3,888.90				0.06201		
PNQS	902	7630.00	10.00	2015		AU PROF/TECH ED		376.03	39.00	424.91	55.69		\$ 3,289.99			0.06201	8.749355	
PNQS	903			2017		RES FORCES OPL TNG		373.37	66.30	421.90	55.69		\$ 3,266.71			0.06201		
PNQS	912			2020		UNICOR LAUNDRY	291,760.00	8,793.40	12,000.00	10,932.32	545.91	\$ 18,092.04				0.06201		
PNQS PNQS	914 926	28311.00 7854.00	5.00 8.00	2015 2013		WHSE SUP EQUIP BSE	107,480.00	595.70	19.50	1,039.97	36.73	\$ 6,664.83				0.06201	8.749355	
PNQS	1033	11945.00		2013		AVDIO-VISUAL FACILITY AU PROF/TECH ED	77,400.00	387.07 588.68	31.20 11.70	437.38 929.38	55.69		7 0,000.00	\$ 163.13		0.06201	8.749355	
PNQS	1033	10271.00		2013		BE STOR CV FCLTY	179,595.12	506.08	58.50	1.184.94	77.80 115.37	\$ 4,799.57 \$ 11,136.69				0.06201	8.749355 8.749355	
PNQS	1036	1536.00		2012		H/SHP, AUTOMOTIVE	26,857.96	75.70	29.95	1,164.94	115.37	\$ 1,665,46				0.06201	8.749355	
PNQS	1073	4840.00	24.20	2014		H/SHP, AUTOMOTIVE	84,630.55	238.53	94.38	558.38	115.37					0.06201	8.749355	
PNQS	1075	1536.00		2014		H/SHP, AUTOMOTIVE	26,857.96	75.70	29.95	177.21	115.37	\$ 1,665,46				0.06201	8.749355	
PNQS	1110	3624.00	12.08	2020		HOPPER LODGE	63,368.00	187.12	47.11	427.72	118.03	\$ 3,929.45					8.749355	
PNQS	1208	7217.00		FPC		HQ, SPECIFIED	73,334.03	372.64	140.73	671.38	93.03	\$ 4,547.44				0.06201		
PNQS	1209	6944.00		FPC		HQ GROUP	70,560.00	358.55	135.41	645.98	93.03	\$ 4,375.43				0.06201	8.749355	
PNQS	1210	7687.00	38.44	FPC		HQ WG	78,109.84	396.91	149.90	715.10	93.03	\$ 4,843.59				0.06201	8.749355	
PNQS	1211	7045	35.225	FPC		FED PRISON FCLTY	68,320.00	426.80	137.38	715.46	101.56	\$ 4,236.52	\$ 3,734.22	\$ 718.29	\$ 8,689.04	0.06201	8.749355	5.2286
PNQS	1214	8010	40.05	FPC	:	FED PRISON FCLTY	108,960.00	314.20	156.20	726.93	90.75	\$ 6,756.61	\$ 2,749.05	\$ 816.68	\$ 10,322.34	0.06201	8.749355	5.2286
PNQS	1215	2843	14.215	FPC		FED PRISON FCLTY	17,560.00	146.80	55.44	225.81	79.43	\$ 1,088.90	\$ 1,284.37	\$ 289.87	\$ 2,663.13	0.06201	8.749355	5.2286
PNQS	1417	18467.00	40.00	2013		VOQ (O1-O10)	80,760.00	Hot water	156.00									
							00,700.00	from 1421	100.00	275.63	14.93	\$ 5,007.93	\$ -	\$ 815.66	\$ 5,823.59	0.06201	8.749355	5.2286
PNQS	1418	18472.00	40.00	2013		VOQ (O1-O10)	82,600.00	Hot water	156.00	281.91	45.00	6 5 400 00		\$ 815.66	6 5007.00	0.00004	0.740055	5 0000
PNQS	1419	18491.00	39.00	2013		VOQ (O1-O10)		from 1421 Hot water		281.91	15.26	\$ 5,122.03		\$ 815.66	\$ 5,937.69	0.06201	8.749355	5.2286
INUS	1419	10491.00	39.00	2013		VOQ (01-010)	82,960.00	from 1421	152.10	283.14	15.31	\$ 5.144.35		\$ 795.27	\$ 5,939.62	0.06201	8.749355	5.2286
PNQS	1421	400.00		2013	İ	HTG FCLTY BLDG	584.00	4,791.19	-	5,416.04	13,540.10	\$ 36.21	\$ 41,919.85		\$ 41,956.06	0.06201		
PNQS	1422	7924.00	16.00	2013		VOQ (O1-O10)	36,440.00	390.52	62.40	565.65	71.38	\$ 2,259.64				0.06201		
PNQS	1425	19217.00	96.09	2020		RITCHEY CENTER	289,800.00	947.07	374.73	2,059.27	107.16	\$ 17,970.50				0.06201	8.749355	
PNQS	1450	10342.00	21.00	2014		HADDON HALL	46,399.45	509.68	81.90	734.30	71.00	\$ 2,877.23				0.06201	8.749355	
PNQS	1451	2954.00	80.00	2014		TV PROD FCLTY	681,157.65		312.00	2,324.79	787.00	\$ 42,238.59	\$ -	\$ 1,631.32	\$ 43,869.91	0.06201	8.749355	5.2286
PNQS	1468	18495.00	40.00	2013		VOQ (O1-O10)	54,400.00	Hot water	156.00									
								from 1421	100.00	185.67	10.04	\$ 3,373.34		\$ 815.66		0.06201	8.749355	5.2286
PNQS	1469	680.00		2013	1	AIR COND PLT BLDG	156,800.00		-	535.16	787.00	\$ 9,723.17	\$ -	\$	\$ 9,723.17	0.06201	8.749355	5.2286
PNQS	1470	18466.00	40.00	2013		VOQ (O1-O10)	99,840.00	Hot water from 1421	156.00	340.75	18.45	\$ 6.191.08	•	\$ 815.66	\$ 7.006.74	0.06201	8.749355	5,2286
Total		737641.00				+	14.449.733.33	37,845.67	19.065.44	92.082.55			\$ 293,683.02		\$ 1,032,260.39	0.06201	0.749355	5.2266
i Ulai	FY2012 Reim	bursable year	total		 	+	171,209,616.00	321,773.00	405,719.00	910,294.47	124.03	\$11,012,836.46			\$15,653,789.65	-		-
					<u> </u>		8.4%	11.8%	4.7%	10.1%		5.8%	11.7%	4.6%	6.6%			
Estimates																		